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CONGENITAL DYSCHEZIA.*

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OWING to the acute angle formed at the pelvi-rectal flexure, the passage of fæces along the intestines is obstructed at this point. Consequently the pelvic colon becomes filled with fæces from below upwards and the rectum remains empty until immediately before defæcation. The entry of fæces into the rectum gives rise in newborn infants to reflex defæcation, and in older children and adults to the sensation of fulness, which is the natural "call to defæcation." The passage of fæces from the pelvic colon into the rectum is the result of active peristalsis in the former, brought about reflexly by various stimuli, the chief of which is the taking of food into the empty stomach. In my investigations with Mr. H. W. Barber and Mr. K. H. Digby we found that the rectum is insensitive to tactile and chemical stimulation, and that the call to defæcation is a form of muscle-sense, depending upon the distension of the rectum, which occurs as soon as fæces pass beyond the pelvi-rectal flexure (1). If a response is not at once made to the call to defæcation, the desire passes away. This is not due, as has been supposed, to the fæces being carried back into the pelvic colon by anti-peristalsis, but to the

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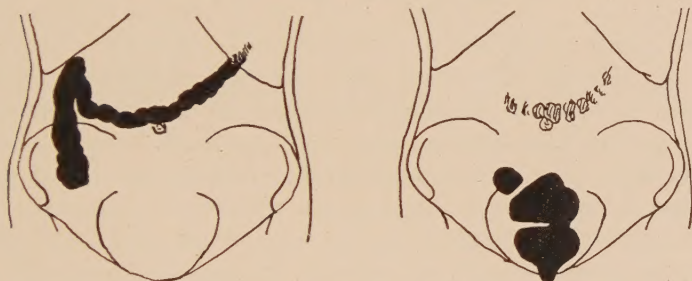
relaxation of tone, which occurs in the muscular coat of the rectum after it has been subjected to a certain degree of tension for a short period. The call to defæcation only returns after a further quantity of fæces has entered the rectum and produced a rise in the intra-rectal pressure. As I first pointed out in a communication to the Medical Section in February, 1908, all cases of constipation can be divided into two classes: in the first, which may be called *intestinal constipation*, the passage of fæces through the intestines is delayed, whilst defæcation is normal; in the second class, for which I adopted the name *dyschezia*, there is no delay in the arrival of fæces in the pelvic colon, though their final expulsion is not adequately performed. It is extremely important to recognise these two classes of constipation, as their treatment is entirely different: diet, abdominal massage and aperients, which are appropriate for intestinal constipation, are quite useless in dyschezia, attention to the hygiene of the bowels and re-education of the defæcation reflex by means of graduated enemata being the correct treatment.

I wish to-day to draw the attention of this Section to a class of dyschezia, which depends upon a congenital deficiency of the muscle-sense of the rectum. In a mild form it is not uncommon in infants, in whom the slight distension produced by the introduction of the finger or a piece of soap into the rectum results in an adequate stimulus. In the majority of cases the muscle-sense develops as the infant grows older, but congenital deficiency is occasionally the starting-point of dyschezia which lasts through life. This is particularly likely to occur if such infants are treated by aperients, which only hasten the passage of fæces through the small and large intestines, where no delay exists, and do not influence the rectum, which is the true seat of the complaint.

The condition can be recognised by making repeated digital examinations, when it is found that the rectum is constantly filled with fæces, even immediately after the bowels have been opened. In many cases the loss of sensibility of the rectum is further shown by the fact that the child does not cry or offer any resistance during rectal examination. Dyschezia should always be suspected in severe cases of constipation in infants and children, when ordinary methods of treatment by diet, aperients and abdominal massage have failed. Thus one of the worst cases I have seen was in a girl, aged 5 years, who was sent to me by a physician to one of the children's hospitals; he had found that treatment in the hospital for thirty-two weeks with laxatives, agar-agar, petroleum and electrical massage produced no improvement, but that glycerine and water enemata caused the

bowels to open. In such cases it is often thought that when treatment suitable for intestinal constipation is given regularly, whilst enemata are given once or twice a week, the former prepares the way for the latter by hastening the arrival of the fæces in the rectum. As a matter of fact, the special diet, drugs and massage are quite unnecessary, for the natural action of the bowels is generally sufficient to bring the fæces to the rectum, the enemata acting just as well without any additional treatment. In the case just referred to a slow but steady improvement has resulted from the daily use of glycerine enemata, graduated in the manner to be described presently, no other treatment being employed. In mild cases the bowels may open when aperients are given alone, as fluid fæces enter into the anal canal, which may retain its tactile sensibility and so may be the

FIG. 1.—CONGENITAL DYSCHEZIA.



(a) Ten hours after bismuth meal.

(b) Thirty-four hours after bismuth meal; rectum full of bismuth-containing fæces, but no desire to defæcate.

starting-point of the defæcation reflex. Such treatment, however, is very undesirable, because the bowels only act when the stools are fluid, much water and nutrient material being consequently lost. In doubtful cases an X-ray examination is helpful, and it was by this means that I learnt to recognise the condition. Between half an ounce and two ounces of bismuth oxychloride, according to the age of the child, are given in milk or porridge, the bowels having previously been emptied by means of enemata. Dr. H. Semon, in an unpublished investigation carried out at my suggestion, found that the rate of passage through the intestines in infants is about the same as that of adults, four hours being required to reach the cæcum, six the hepatic flexure, ten the splenic flexure and twelve the pelvic colon. In congenital dyschezia the pelvic colon is reached in the normal time, and in twenty-four hours almost all the bismuth is

collected in the distended rectum. This is well seen in Fig. 1, which is reproduced from tracings taken from the case of a girl, aged 8 years, who had suffered from extreme constipation from birth, and had been drinking an infusion of twenty to thirty senna pods every night.

The dyschezia soon leads to secondary retention of fæces in the pelvic colon, and in severe cases in still higher parts of the large intestine, as, unless enemata are given, the rectum is never empty, and in spite of its dilated condition there is insufficient room for all the retained fæces. The irritation caused by the retained fæces is likely to give rise to catarrhal colitis, and in the girl of eight with congenital dyschezia, to whom I have already referred, retention occurred as far back as the cæcum, giving rise during the last four years to repeated attacks of typhlitis, with pain, tenderness, vomiting and pyrexia, which were at first diagnosed as appendicitis and were only recognised to be something different, when five further attacks occurred after the removal of the appendix eighteen months ago. X-ray examination after the colon had been emptied showed that there was no delay in the passage of fæces as far as the rectum, but that severe dyschezia was present.

Treatment.—The child should take an ordinary diet, and neither aperients nor abdominal massage are required. When the stools are so hard that defæcation is rendered painful and difficult, a little liquid paraffin should at first be given. He should sit on a chamber for at least ten minutes every morning after breakfast and try to open his bowels, whether he feels the desire or not. If the attempt fails, as it probably will for some time, he should be given either a water or glycerine enema, after which he should repeat the attempt in the same position. In the majority of cases treatment by glycerine enemata is most effective. One ounce of glycerine is given the first day; the next day half a drachm of the glycerine is replaced by water; the third day one drachm, and so on, the glycerine being made more and more dilute until finally it is all replaced by water, which can then be also dispensed with. In some cases water enemata act better. One ounce is required for a new-born infant, six ounces for children a year old, and a pint for children of eight. It should be introduced from a funnel at a pressure not greater than eighteen inches through a tube inserted no further than just beyond the anal canal. The amount used is reduced by one twentieth part at a time until no more is required. In many cases the substitution of glycerine by water and the diminution in the amount of water used must be very slow and may

have to be prolonged over weeks or even months. I believe, however, that in all cases in children a cure eventually results, but if the condition is allowed to continue until adult life it may, in rare instances, be necessary to use enemata permanently. If the injection is given under low pressure and the glycerine is as dilute as possible and as little water used as possible, the enemata never lose their effect.

REFERENCE.

- (1) HERTZ, A. F.—'Goulstonian Lectures on the Sensibility of the Alimentary Canal in Health and Disease,' Oxford, 1911.

HEREDITARY SYPHILIS AND ITS TREATMENT BY ARSENOBENZOL ("606").

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THE recorded cases of hereditary syphilis treated with arsenobenzol are few in number, and, in England, very few. This is not, however, because the older methods of treating the disease have been so successful, for a glance at any reliable table of statistics will show how extremely fatal a disease hereditary syphilis has always been. For instance, the mortality in hereditary syphilis is well shown by the records of nearly two thousand syphilitic pregnancies collected by Hyde. Of these pregnancies, abortions and stillbirths accounted for 30 per cent.; during the first twelve months roughly 60 per cent. died, and rather less than 10 per cent. survived the first year. Of these survivors the majority were breast-fed babies, and it has been estimated that as many as 99 per cent. of artificially reared syphilitic infants die within the first twelve months. The effect of syphilis on the birth-rate cannot be better exemplified than by these records, where, out of 1700¹ pregnancies, 1535 resulted either in abortion or death before the end of the first year.

Hereditary syphilis is, moreover, responsible not only for lack of vitality, but also for a greatly increased diminution of resistance to disease and a marked incapacity to recover from its effects. Dr. Bennie, honorary physician to the Children's Hospital, Melbourne, basing his statistics on twenty-five years' experience and a quarter of a million attendances or visits, says that fully 30 per cent. of all the morbidity in the hospital was caused by syphilis, and that the

syphilitic factor was present in over 40 per cent. of the children who died. The chances of a heredo-syphilitic dying under fifteen years of age are nearly seven times greater than of the child free from syphilis. As an evidence of lowered resistance occasioned by hereditary syphilis, his careful analysis of all cases of infectious diseases in children shows that, excluding widespread epidemics, the chances of a syphilitic getting typhoid fever are nearly two and a half times as great as for a non-syphilitic; for scarlet fever three times; for measles two and a half times; for diphtheria nearly seven times. Again, syphilis lowers not only the general, but also local resistance. Thirty per cent. of the children with tuberculous hip disease were congenital syphilitics, and 60 per cent. of the cases of tuberculous meningitis. Of the prejudicial effects of hereditary syphilis in later life and the constitutional and local symptoms produced by late heredo-syphilis every physician has had sad experience. The beneficial effect of mercury in many cases is undoubted, and I am not going to argue now whether mercury is or is not capable of curing, as opposed to rendering latent, syphilitic disease, congenital or acquired, but statistics such as the above are eloquent witness to the fact that some additional remedy is badly needed in the treatment of hereditary syphilis.

In the first cases of hereditary syphilis in infants which I treated with salvarsan, the drug was injected intra-muscularly, and the result was good, but not so good as when, later, it was injected intra-venously. At one time it seemed possible that the injection of the mother while she was suckling the child might indirectly benefit the infant, and perhaps bring about its cure, but the published records of cases treated in this way show that little, if any, benefit is derived from such treatment. Some cases have recently been recorded by Jeanselme which show that the effects of maternal injections on the deeper or visceral lesions of hereditary syphilis are distinctly unfavourable. They aggravate the disease and sometimes kill the child. In four cases under his personal observation the injection of the mother with salvarsan was followed by absolutely bad effects in the infant; in one case no effect was produced, and in the fourth the symptoms at first diminished, only to reappear, accompanied by a general rash, coryza, and rhagades. Sixteen cases were tabulated, of which ten were admittedly failures, and of the remaining six the after-histories were not always satisfactory or convincing.

An example of treatment by intra-muscular injection of "606" is the following case, which I showed at the Children's Section of the Royal Society of Medicine. A boy, aged 14 weeks, was admitted on

January the 2nd, 1911, under my care at the Queen's Hospital for Children, suffering from hereditary lues. When three weeks old he developed a running from the nose, which increased until the nostrils became swollen and a profuse muco-purulent rhinitis was present. A papular eruption also showed itself on the buttocks, thighs, soles of the feet, neck and face. Mucous tubercles appeared round the arms and at the angles of the mouth, and in these Dr. Woodforde, pathologist to the hospital, found large numbers of the *Spirochæta pallida*.

When admitted to the hospital the child showed evidences of malnutrition, and the bridge of the nose was depressed. His weight was 4 kilos. He had not been given mercury in any form. The child was fed on the breast, and it was arranged that his mother should come to the hospital several times a day to suckle him.

On January the 4th a dose of 0.04 grm. of freshly prepared salvarsan was given by me intra-muscularly in the scapular region. The dose was, therefore, one of 0.01 grm. per kilo of body-weight. On the 5th the temperature rose to 100° F., there was a well-marked hard swelling round the point of injection, but the mucous tubercles seemed to be drying up and the discharge from the eyes was less. The snuffles, however, showed no change.

The child improved considerably from day to day, and by the 19th the mucous tubercles, both round the anus and the mouth, had quite gone, and the snuffles were cured. The skin was clear, except for some mottling and discoloration at the site of the previous lesions.

Four days after this the child unfortunately developed measles, and went through a typical attack in the isolation ward. By February the 3rd the temperature was again normal, and the patient apparently in good health except for a slight cough, but the induration round the point of injection in the subscapular region had not disappeared. The child had put on more than a pound in weight during his stay in hospital. On the 8th, however, some fresh mucous tubercles made their appearance, and a muco-purulent rhinitis again showed itself. It now became a question whether to give a second dose of salvarsan, but, inasmuch as the beneficial effects of the first dose had apparently become exhausted at the end of five weeks, I hardly thought such a course justifiable. I therefore, on the 10th, put the patient on daily inunctions of ung. hydrarg., and at the end of a week the recurrent syphilitic symptoms had disappeared and the child was sent home. On March the 29th the child, although free from syphilitic symptoms, still gave a positive

Wassermann reaction. He has remained free from any symptoms of syphilis for the past twelve months.

Another child, six months old, with hereditary syphilis, whom I injected from the same tube of salvarsan on the same day with a dose of 0.05 grm., developed a temperature of 103.8° F. two days later, while an eye case of Mr. Sydney Stephenson's—a girl with interstitial keratitis, aged 10 years—also injected from the same tube on the same day in the gluteal region, showed but little reaction, and her temperature did not rise above 99° F.

While the intra-muscular injection of salvarsan has a well-marked beneficial effect in clearing up the active symptoms of hereditary syphilis, the reappearance of similar symptoms a few weeks after injection obviously necessitates the employment of more than one such injection, or the supplementing of such injection by some other drug, as in the case quoted above. More successful results can, however, be obtained by the injection of salvarsan intra-venously.

The following is one of the youngest, if not the youngest, case on record of the successful intra-venous injection of salvarsan, with resulting cure of hereditary syphilis. The case was shown at the Royal Society of Medicine meeting on November the 24th, 1911. For notes of the case I am indebted to Dr. Perry, Resident Medical Officer.

The patient was a male, aged 8 weeks, who was admitted to the Queen's Hospital for Children with an eruption which had been present for four or five weeks. The child presented a thin, wasted appearance, with an old and shrivelled look, and had well-marked snuffles. The skin was of a brownish-yellow tint and was partly covered with a maculo-papular eruption, especially well marked in the genito-crural region and on the buttocks. The macular element was well defined and the papules were flattish. The eruption was of a pinkish-brown tint, and was present not only on the face and trunk, but also on the palms and soles. In addition there were numerous superficial ulcers, especially on the trunk and thighs, the muco-purulent discharge from which was so offensive as to make the ward objectionable to other patients. There were fissures at the angles of the mouth and some moist papules both here and round the anus. The weight was 10 lb. The case could not, perhaps, be said to be a hopeless one, but the child was at least extremely ill.

The Wassermann reaction was positive and the *Spirochaeta pallida* was found in the skin lesions.

On June the 21st, 1911, a few days after the patient had been admitted to hospital, no mercury having been administered at any time, a dose of 0.03 grm. arsenobenzol was injected by me into the

basilic vein. The dose was, therefore, about one centigramme salvarsan for each kilò of body-weight.

On June the 24th the coppery eruption had greatly diminished in intensity, and the ulcerated, foul-smelling lesions were much cleaner. The child's general condition was much more satisfactory. The skin lesions continued to improve, the ulcers began to granulate up during the succeeding week, and the patient was evidently better in every way. On June the 30th a further dose of salvarsan was given, but this time intra-muscularly into the glutei. The temperature rose after this injection to 100.2° F., but the child's general health still continued to improve, he put on weight rapidly, and by July the 7th all syphilitic symptoms had disappeared and he was allowed to return home. The Wassermann test was then negative.

The child has attended my out-patient's department regularly since then, and when seen at the beginning of March was still free from all symptoms and appeared strong and healthy.

Here, then, we have a child, who, judging by appearances, was bound to die within a very short time, not only rescued from death, but also cured of its disease and become more healthy than at any previous moment of its life. And this by only two doses of a drug which caused no unpleasant symptoms and was followed by no bad after-effects. Successful cases such as this are very encouraging, and lead us to hope that in suitable conditions we have in salvarsan a drug which is capable of rendering the greatest service in the treatment of hereditary syphilis. It is impossible, as yet, to discuss the cure of syphilis by "606," as distinguished from the alleviation of symptoms, since no case has been under treatment for a sufficiently long time to make sure that a recurrence will not occur, and the mere fact that the Wassermann reaction remains negative for a year or two after treatment is no proof of cure, for the full significance of this reaction has not yet been worked out.

Wechselmann reported that out of 268 cases treated by salvarsan, the Wassermann reaction became negative in 153 in a period of four to five weeks. Schreiber and Hoppe found a negative reaction in 85 per cent. of their patients within seven weeks of injection. Neisser found a negative reaction in 44 per cent. of his cases within four weeks of injection. Zeiler, however, in observations on patients for as long as ten to fifteen weeks, found that they did not show permanent negative reactions. In the majority of cases, however, after an injection of salvarsan the Wassermann reaction becomes negative, to become positive again later in some cases.

Results like Lesser's are somewhat hard to understand, for in

300 cases he found a negative reaction in more than one half of the men within five weeks, but only in a few of the women. Again, an injection of salvarsan may convert a previously negative serum into a positive one. This seems to be explicable on the theory that a dose not large enough to kill the spirochaetæ stimulates them to increased activity and so to the production of the immune body which is found in positive sera. When the treponemes are destroyed it is, on the other hand, an anti-endotoxin which is produced. For the present, however, at any rate, we seem justified in considering that the presence of a positive Wassermann indicates an active syphilitic focus and the necessity for treatment, while a negative Wassermann is not conclusive one way or another.

We have not, as yet, a sufficient number of cases of syphilis, chiefly virulent syphilis, in which it has been necessary to give six, seven or eight injections of salvarsan, on which to base conclusions, but there is no reason to think that the drug produces any anaphylaxis, or that moderate doses may not be repeated seven or eight times when the symptoms are resistant. It has yet to be determined how far the first or second dose causes any immunity against the action of the drug. In babies, however, it is rare to need more than two injections of salvarsan, and, in the case reported above, after the first intra-venous injection a second intra-muscular injection was given. Thus, after the first rapid action of the drug, an additional store is introduced which can be gradually drawn upon over a considerable period and so supplement the beneficial action of the initial dose.

My present view is, however, in favour of additional treatment by mercury after the first or second dose of "606," and I am of opinion that it is by such means that we shall avoid the possibility of late recurrences. In salvarsan we have a drug which at least has wonderful powers of rapidly curing syphilitic symptoms, and, when combined with mercury, of curing the disease in the shortest time at present possible.

PURPURA FULMINANS AS A SEQUELA OF SCARLET FEVER.

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PURPURA fulminans is not only one of the rarest diseases met with, but, as C. Elliott has well described it, presents also an impressive and dramatic picture of rapid change in the functions of

the body, which one may see with one's own eyes marching irresistibly in a short space of time from health to death.

The following case may be classified, according to Osler, as one of the infectious purpuras, or it may be a distinct clinical entity, the ætiology of which is unknown.

The patient, a boy, aged 5 years, was admitted to the Grove Fever Hospital on December the 12th, 1911, with a history of sore throat on November the 29th and of a rash all over the body on December the 1st. On examination he presented well-marked desquamation of the trunk and limbs, which at once suggested scarlet fever. The fauces were injected, the tonsils slightly enlarged, and the sub-

FIG. 1.



maxillary lymph-glands palpable. He was fairly well nourished, and had always been quite healthy except for an attack of whooping-cough in infancy. There was no sepsis about the mouth. The heart was sound. During the next four days he appeared to be quite well, and was able to take full diet. On December the 17th, however, he vomited some greenish fluid just before dinner, and did not seem very well in the afternoon. During the night his sleep was fitful. About 4 a.m. on December the 18th a dark-coloured mark like a bruise showed itself on the left buttock, and others soon appeared on the left thigh and leg, and later on the leg and thigh of the right side. By 9 a.m. the boy looked ill, and his face and lips had become quite pallid. The pulse-rate had risen to 140 and the respirations were 28. The left buttock and lower limbs now presented several ecchymotic areas of a dark purplish colour, the advancing edges being reddish-black and sharply demarcated. The areas were raised above the surrounding skin, felt warm, and imparted a sense of want of elasticity to the palpating fingers.

There was no paræsthesia nor hyperæsthesia. The larger areas developed in rings (*vide* photograph taken at 2 p.m.) with a central area of apparently healthy skin, which gradually became encroached upon, till ultimately, at 7 p.m., the whole presented one great black patch. Four hours later the patches had not increased in size, but the skin of the unaffected parts of the body had become very pallid with the yellow tint and the waxen hue of grave anæmia. The left foot and leg were now considerably swollen, and the pulse had become very feeble. During the night the patient was very restless, although the mind remained clear till the end, which occurred at 5 a.m. next morning, twenty-five hours after the first appearance of the ecchymoses. On the 18th the urine, hitherto clear, contained a cloud of albumin but no blood, and no blood appeared from any of the other mucous surfaces.

At the autopsy, made four and a half hours after death, six ecchymotic patches were found:

- (1) A large patch on the left buttock.
- (2) A large patch on the antero-external region of the left thigh.
- (3) A large patch on the posterior aspect of the left leg from the middle of the calf to the tendo Achillis.
- (4) A patch over the left shin above the ankle.
- (5) A patch on the right leg behind and above the internal malleolus.
- (6) A small patch on the upper and posterior part of the right thigh.

The ecchymoses extended to the deep fascia covering the muscles. All the internal organs were markedly pale. There was no clot in the heart chambers, the blood being thin and fluid. No hæmorrhages were found in the supra-renals, the brain, nor in any other organ. There was, however, a small extravasation of blood into the connective tissue around the outer aspect of the left kidney.

Cultures on agar and in broth from the heart chambers and from the ecchymotic tissue remained sterile.

Throat cultures contained no diphtheria bacilli. Microscopical sections of the liver and kidney showed nothing abnormal.

The blood-count made ten hours after the appearance of the ecchymosis revealed the following: Hæmoglobin, 65 per cent.; red cells, 3,670,000; numerous microcytes, slight poikilocytosis, no normoblasts; white cells, 15,700. Differential count: Polymorphonuclears, 86 per cent.; small lymphocytes, 7 per cent.; large mononuclears, 4 per cent.; eosinophiles, 5 per cent.; myelocytes, 2.5 per cent.; mast cells, 0.

The blood-platelets were not increased.

The present case corresponds almost exactly to C. Elliott's case, and also to one reported by J. D. Rolleston and myself in February, 1910. In the first case scarlet fever had reached its twenty-second day. In the latter case the pre-existence of scarlet fever was suggested by some desquamation of the trunk, submaxillary adenitis, and a history of sore throat, headache and vomiting ten days prior to the appearance of the ecchymoses. In the present case there was not the slightest doubt that the patient was in the second week of an attack of scarlet fever. The desquamation was well marked and the history of sore throat and rash corresponded. Moreover, on December the 13th a sister was admitted to the Grove Hospital with well-marked rash, tonsillar exudate, and inflamed fauces, and on December the 14th another sister was admitted with a rather severe attack of scarlet fever with bright rash and ulceration of the fauces. Both sisters desquamated well.

Of sixty-four cases of purpura fulminans published up to the present, including a case recently recorded by Elliott and Martland, and one by Weill and Mouriquand, seventeen have followed scarlet fever, the ecchymoses occurring usually in the second, third, or fourth weeks of the disease.

REFERENCES.

- (1) ELLIOTT, C.—'Arch. of Intern. Med.,' 1909, iii, p. 193.
- (2) ELLIOT, D., and MARTLAND, H. S.—'New York. Med. Journ.,' 1911, ii, p. 1031.
- (3) ROLLESTON, J. D., and MCCRICK, T.—'BRIT. JOURN. CHILD. DIS.,' 1910, vii, p. 58.
- (4) WEILL, E., and MOURIQUAND, G.—'Arch. de Méd. des Enf.,' 1911, xiv, p. 610.

A FAMILY WITH MEMBRANOUS DISCHARGE FROM THE NOSE.*

By A. M. GOSSAGE, M.D., F.R.C.P.,

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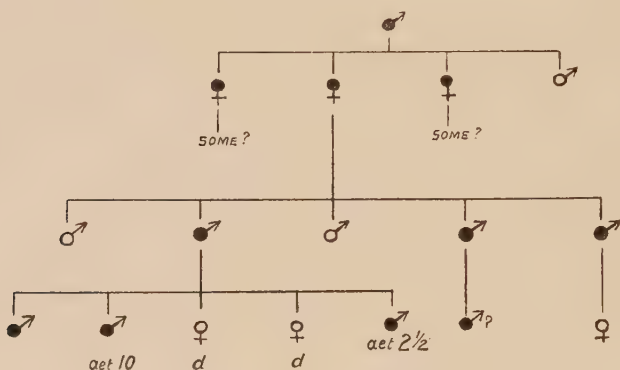
FIBRINOUS rhinitis is not very uncommon in children. According to Lambert Lack (3) it is commonest in early childhood and is ushered in by slight malaise, which is not sufficient to cause the child to lie up, and only lasts for a day or two. There is a nasal discharge, associated with fibrinous or membranous exudation on the nasal

* A paper read before the Clinical Section of the Royal Society of Medicine on March the 8th, 1912.

mucous membrane, which persists for six to eight weeks, and then clears up, leaving no sequelæ. In nearly all the cases bacilli indistinguishable from the Klebs-Loeffler bacillus can be found, but although the disease is infectious, it does not seem to give rise to true clinical diphtheria. True diphtheria, of course, invades the nostrils not infrequently and gives rise to a severe illness, with formation of membrane in the nose.

A further type of membranous formation in the nose has been described by Baumgarten (1). A strong baby girl was noticed from birth to have crusts about the nose. With a probe and wool a long, thin tube, like parchment, could be obtained from the nostrils, which

FIG. 1.



took three to four days to re-form. At the age of three years a bad smell was noticed, and after four years typical ozæna developed. When the child was two months old the nose was washed out with iodo-glycerine, and after this no more tubes were formed, but occasionally there were slight crusts; later even these disappeared. The mother suffered from ozæna, but there was no other abnormality in the family; twin sister was quite normal. Baumgarten further states that he has met with two other similar cases: tube formation in early infancy and development of ozæna about the fifth year of life. He considers that ozæna is frequently inherited chiefly from mother to daughter, and is much commoner in women.

I have recently come across a remarkable family, several members of which have a persistent membranous discharge from the nose. The condition is first noticed at birth, and apparently persists throughout life. It causes no impairment of health, the bronchitis from which the first member I saw was suffering being probably an acci-

dental concomitant. There is only very slight discomfort, though there is a tendency to the development of a bad smell if the nostrils are not kept clear. In no case, however, is there any sign of ozæna. Specimens of the discharge, which usually took about twelve hours to re-form, were obtained from the father and two of the children, and in all cases were found to be a more or less complete fibrinous cast of the nostrils. Dr. Ross, the pathologist at the East London Hospital for Children, kindly examined the discharge for me, and reported as follows: Film preparations showed polymorphonuclear cells embedded in a network of fibrinous matter. The organisms present were bacilli, diplococci, and short diplobacilli; no evidence of *Bacillus diphtheriæ* or *Bacillus ærosus*. Attempts to embed in paraffin and cut sections failed owing to the friability of the material.

One of the boys was taken into the hospital for twenty-four hours, but, unfortunately, had no discharge during that time. The nostrils were examined on several occasions, and nothing abnormal could be seen except once, when some fibrinous exudation was found over one lower turbinate bone.

In the appended genealogical tree the affected individuals are black and the normal white. It can be seen that at least four generations have been affected, and that males and females are attacked equally. Of the children of affected persons with normal mates, roughly half are affected and half normal. This suggests that the inheritance affords another example of Mendelism in human beings, and that the abnormal condition is dominant to the normal (2). Unfortunately there is no record of any offspring from the normal members of the family, so that it is impossible to say whether all their children are normal, as would be expected.

It is a matter of great interest to find a fibrinous exudation on a mucous membrane resulting from a congenital abnormality and not from some infective inflammatory process. I have not been able to find any record of a similar condition in medical literature.

REFERENCES.

- (1) BAUMGARTEN.—'Archiv f. Laryngol. u. Rhinol.,' 1909, xxii, p. 492.
 - (2) GOSSAGE.—'Quart. Journ. Med.,' 1908, i, p. 331.
 - (3) LAMBERT LACK.—'Med.-Chir. Trans.,' 1899, lxxxii, p. 1.
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A CASE OF MEDIAN DERMOID CYST OF THE NOSE.

By MACLEOD YEARSLEY, F.R.C.S.,
Senior Surgeon to the Royal Ear Hospital, etc.

THE recent publication, by Howell Evans (*BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1911, viii, p. 535), of a short paper on "Median

FIG 1.



Congenital Fissures, Fistulæ and Dermoid Cysts of the Nose," in which Fig. 2 represents a case of median nasal dermoid very like a case operated upon by me in 1911, renders the latter doubly interesting.

The patient, a girl, aged 5 years, presented herself at the Royal Ear Hospital in May, 1911, with a swelling in the median line of the nose, which had been first noticed two years earlier and was said to be increasing in size. It is well shown in the accompanying photograph, in which the dotted outline shows the extent of the cyst. It measured one inch, by three-quarters of an inch in its widest part, and was soft and elastic to the touch, with a feeling of boggianness on pressure. There was no sign of any fistula in the neighbourhood.

On May the 12th the patient was anæsthetised and the cyst was removed through a median incision. On dissecting it out, it was

found to be attached to the nasal bones close to their junction with the lateral cartilages. It contained a greyish, putty-like material and was lined with fine white hairs. The wound was drawn together by two fine horse-hair stitches and quickly healed.

On section the cyst wall showed a lining of skin with hair-follicles and sebaceous glands.

London and Provincial Societies.

ROYAL SOCIETY OF MEDICINE.

SECTION FOR THE STUDY OF DISEASE IN CHILDREN.

Friday, February the 23rd, 1912.

Dr. G. A. SUTHERLAND, *President, in the Chair.*

Paralysis of the Muscles of the Neck (? Poliomyelitis).—Dr. R. HUTCHISON.—Boy, aged $2\frac{1}{2}$ years. Admitted to the London Hospital on October the 28th, 1911. Ten days before admission had "feverish attack," and both ears discharged. Weakness of neck noticed since. Was in hospital six weeks before that for pneumonia. On admission was no more able to hold up his head than a newly born baby. Paralysis seemed to involve both sterno-mastoids, both trapezii, and retrocollic muscles. It was more marked on the left side. No other muscles affected. Radiogram of spine negative.

On February the 6th, 1912, there was imperfect R.D. in the trapezii and sterno-mastoids. Other muscles could not be satisfactorily tested. The paralysis is now much less marked than when the patient first came under observation.

The consensus of opinion was that it was a case of poliomyelitis.

Hysterical Vomiting; Achylia.—Dr. R. HUTCHISON.—Girl, aged 10 years. About two years ago patient's mother died suddenly. Vomiting set in immediately after this event, and continued in spite of treatment in two hospitals until she came under observation three months ago. She was then much emaciated (weight $1\frac{1}{2}$ st.), the skin dry, brown, and scaly. No visceral disease. Bowels somewhat loose. Test-meal showed complete achylia.

Under treatment by isolation, suggestion, and the use of hydrochloric acid and pepsin, the vomiting has entirely ceased, but the nutrition has not much improved.

Green Teeth, subsequent to a Prolonged Jaundice in the First Weeks of Life.—Dr. H. THURSFIELD.—The boy was first seen at the age of three weeks. He had been jaundiced from birth, or possibly from the third day of life only, and during the first week he had passed very black stools, and had a purulent discharge from the navel. When seen the umbilicus

was perfectly healthy; the liver and spleen were not enlarged, and the child, though small—6 lb. 5 oz.—seemed quite healthy. The jaundice was at this time deep, and remained so for the next seven weeks, slowly disappearing. When it had gone the boy put on weight rapidly, and at four months of age weighed 9 lb. He was not seen again till he was nine months old, when he was brought again for an attack of diarrhoea. The two lower central incisors were then a vivid yellow tint, which has become now green. The tint varies considerably; is occasionally quite bright, at other times dull.

Anomalous Jaundice, with Enlargement of Liver and Spleen, and Bile-stained Teeth.—Dr. F. LANGMEAD.—C. M.—, aged 1 year and 9 months. Jaundice began between two and three weeks after birth and persisted until the baby was 1 year and 3 months old. It gradually increased for the first two months of life, and the baby remained deeply jaundiced for twelve months. When first seen it was three weeks old. The liver was definitely enlarged, and the spleen reached down nearly to the umbilicus. The urine was bile-stained. The child's general condition was good. There was nothing to suggest syphilis. It was conjectured that congenital atresia of the bile-ducts was present, since the jaundice started when the child was about two weeks old, and was steadily deepening. However, acting on the principle that a syphilitic icterus was the only variety which was remediable, grey powder was administered. The liver and spleen both subsided rapidly and were not enlarged after about one month's treatment. The jaundice persisted, and was accompanied by hæmorrhage from the bowel and stomach and beneath the skin. The first tooth erupted when the baby was one year old, and four were visible when the jaundice disappeared at fifteen months. All were bright yellow in colour, obviously pigmented by bile. Since then, each tooth as it has erupted has proved to be jaundiced. The yellow colour in them began to change to green about three months ago, and now the coloration has almost gone. Wassermann's reaction was not tested for.

It is not generally recognised that jaundice may affect non-erupted and erupting teeth; perhaps, like the pigmentation of brain and cord which Schmorl has described, it is peculiar to icterus neonatorum.

Athetoid Movements.—Dr. JAMES TAYLOR.—A girl, aged $5\frac{1}{2}$ years. Seventh child; the first two died a few hours after birth; third, fourth, fifth, and sixth alive and well. Patient born at full term; was born "feet first," and was "black and blue" when born. Never walked or crept even. At the age of two years movements of head and hands and also of feet noticed. Now she speaks badly (she never spoke well), but her intelligence is fair. She has involuntary athetoid movements of hands, also of head; legs are stiff. The reflexes are difficult to obtain on account of the rigidity, but the knee-jerks are present and the plantars are flexor.

Transposition of a Viscera in a Girl, aged 12 years.—Dr. L. GUTHRIE.—The patient has complained of shortness of breath which prevents her from taking part in school games. She is fairly well developed, and has had no serious illness. The heart as seen in skiagram is displaced to the right side; the apex is in the sixth space an inch inside and below the right nipple. A faint systolic bruit is heard at the base. Hepatic dulness is absent on the right side, but can be made out on the left side from the level of the sixth rib downwards. Stomach resonance is well defined in the right

hypocondriac region. The spleen is not palpable. There are no signs of pulmonary disease, past or present. The case is regarded as one of primary dextrocardia with transposition of viscera. Cyanosis is absent, and the finger-tips are not clubbed.

Case of Unusual Cardiac Bruit.—Dr. J. A. TORRENS.—Girl, aged 16 years, was admitted to hospital for influenza, when the cardiac murmur was discovered. No history of rheumatism, nor of any cardiac disability at any time. Well-developed girl; no cyanosis, clubbing of fingers, or dyspnoea. The heart is not enlarged to percussion, but the X rays show a globular left ventricle of greater density than normal, suggesting some pure hypertrophy. The action is forcible and regular. There is a loud systolic murmur at the base, best heard over the aortic area, conducted up into the arteries of the neck, but audible over the entire thorax, back and front. On the back the murmur is loudest opposite the third dorsal spine, two inches from the middle line on the left side. The murmur is weakest at the apex of the heart. The second sound is everywhere quite distinct, and there is no diastolic murmur. The pulse, though not collapsing, is not particularly well sustained.

There was a difference of opinion expressed as to whether the case was a congenital or an acquired aortic stenosis.

Arthritis of the Shoulder and Hip (? Tuberculous).—Dr. T. R. WHIPHAM.—Boy, aged 14 years. When three years old he was held up by the arms, and after that his right shoulder "grew out" and the arm could not be raised above the horizontal level. Wasting of the shoulder muscles occurred, but nothing further was noticed until nine months ago, when he started walking lame on the left leg. There was pain in the left hip and knee at first but this seems to have subsided, and the patient has at no time been prevented from doing his work as house-boy. The right shoulder-joint is completely ankylosed and the muscles of the shoulder girdle and arm are much wasted. There is no reaction of degeneration, and sensation is perfect. A skiagram shows complete absorption of the head of the humerus with displacement of the end of the shaft under the tip of the coracoid process of the scapula. The pelvis is elevated on the left side, and the great trochanter of the femur is more prominent and at a higher level than on the right. The movement in the joint is considerably limited and there is evident shortening of the limb. The glutei and leg muscles are definitely wasted. A skiagram shows complete absorption of the head of the femur and elevation of the rest of the bone. No abnormalities in other joints can be seen by means of the X rays. Lately the patient has become somewhat deaf. There is discharge from both ears and the left tympanum is perforated; the septum nasi is deflected to the left and adenoids are present to a slight degree. There are no symptoms or signs of tuberculosis in the chest, and Von Pirquet's reaction is negative. There is a history of pulmonary tuberculosis in the mother, who died at the age of thirty-six years. Five brothers or sisters died in infancy, but four others are alive and well.

The joint lesions were regarded by members as tuberculous.

Proliferative Osteo-arthritis of the Hip in a Youth.—Dr. T. R. WHIPHAM.—A year ago, at the age of 17 years, the patient began to experience pain in the left groin when walking. At first it was of the nature of a "pin-prick," but subsequently it has become more marked; it is only present

when the joint is exercised. The patient walks with a limp on the left leg, which is $\frac{1}{2}$ in. to $\frac{3}{4}$ in. shorter than its fellow. The glutei and leg muscles are wasted and the greater trochanter of the femur is very prominent. In the hip-joint the movements of flexion and abduction are limited, and on rotation the greater trochanter approximates to the anterior superior spine of the ilium, indicating a certain degree of coxa vara. The movements are accompanied by creaking of the joint. A skiagram shows extensive proliferation and lipping of the bones at the hip, together with a thickening of the neck of the femur and a reduction of the angle which it makes with the shaft.

The case was regarded by some as an infective arthritis, and the condition of the teeth was commented upon as being a possible source for the infection.

BRITISH MEDICAL ASSOCIATION. BIRMINGHAM BRANCH.

Friday, October the 27th, 1911.

Case of Transposition of Viscera.—Dr. ROSE JORDAN showed a boy, aged just over 13 years, and who came under her notice in the course of the routine medical inspection of those children about to leave school. The schoolmaster, in presenting him for examination, mentioned that he had several times fainted in school, and that he was said to have a displaced heart. Both on this occasion and on a subsequent occasion when examined he gave ocular demonstration of his liability to faint.

History.—Nothing unusual was noticed about him until he was three months old, when he swooned away one evening and had to fight for his breath. He was seen by two doctors, who did not expect him to live through the night, and who told the mother it was best for him to die, as he could never be strong. He, however, recovered from this attack. From that time until the age of seven he frequently fainted, and sometimes fell into trances, during which he was occasionally unconscious for twenty-four hours. He was always very nervous, and often almost jumped out of bed during sleep. Before the age of seven he contracted measles, chickenpox, and whooping-cough—the latter very badly. Since the age of seven, though still nervous and prone to faint, his general condition had steadily improved.

Circulatory system.—Pulse 72, slightly irregular. Heart's apex-beat visible in the fifth space on the right side, half an inch internal to the mid-clavicular line. Area of dulness reaches from third right space above to apex-beat on right and to mid-sternum on left. The first sound at the apex is rough, and is followed by a short systolic murmur; in the third right space, in this case presumably the area of the pulmonary valve, a rough, short, systolic murmur is also heard. At the left base the heart-sounds are apparently normal.

Abdomen.—Liver dulness on the left side, reaching from the sixth space in the mid-clavicular line above to the costal margin below. As far as can be ascertained the spleen and stomach are situated on the right side, opposite to the positions they would normally occupy. The boy is right-handed, and there is one brother, aged 12 years, who is quite normal.

January the 11th, 1912.

Excision of the Spleen.—Mr. LEEDHAM-GREEN showed a boy from whom he had excised the spleen in April, 1911. The boy had fallen while getting out of a moving train between the platform and the train, with the result that he sustained a compound fracture of the femur, fractures of some of the left ribs with laceration of the lung, and rupture of the spleen. The leg was amputated and the spleen excised. Acute pneumonia followed the accident, but the boy, after a long illness, eventually recovered. When shown, he was in good health and seemed none the worse for the loss of the spleen. He was not anæmic or short of breath, and the blood was normal as regards the red and white cells, and the hæmoglobin was over 80 per cent.

BIRMINGHAM UNIVERSITY MEDICAL SOCIETY.

November the 8th, 1911.

Sarcoma of Naso-pharynx.—Mr. S. G. BILLINGTON.—Girl, aged 13 years. In March, 1911, a lump was noticed in the right side of the neck. This apparently subsided in a few days, but reappeared on May the 2nd, and has gradually become larger since. In August nasal obstruction developed, and has continued since. In September the right cheek and nose began to swell, a bilateral nasal discharge commenced, and has continued, and hæmorrhage from both nose and mouth occurred twice. In the same month epiphora developed, and has continued, and the right eye began to bulge. A fortnight ago the patient became blind in the right eye.

Present condition.—There is a large mass of enlarged glands on the right side of the neck and a few palpable ones on the left. By transillumination the upper half of the right upper jaw is opaque.

There is a sloughing yellow mass in the right nostril, and on palpation of the posterior nares a mass projecting into the naso-pharynx is felt.

There is marked epiphora of the right eye, proptosis, and protrusion of the right cheek.

The right eye shows slight perception of light; the retina shows venous engorgement, but no optic atrophy, and the consensual reflex is present.

Sensation of the intra-orbital nerve is unaffected.

Probable diagnosis.—Malignant growth; probably sarcoma of naso-pharynx.

Interesting features.—(1) Early and bilateral glandular involvement; (2) absence of pain, or involvement of the infra-orbital nerve; (3) the comparative slight amount of hæmorrhage.

MIDLAND MEDICAL SOCIETY.

November the 15th, 1911.

Cerebellar Tumour.—Dr. WALTER JORDAN showed a specimen of cerebellar tumour from a boy, aged 2 years, admitted into the Children's

Hospital on August the 6th with a history of constipation, loss of appetite, and irritability since June, and head-retraction and vomiting since the beginning of July, the vomiting, however, having ceased a week before admission.

On admission, the patient could not stand or sit up; there was marked head-retraction and rigidity of the right arm and leg; no anæsthesia; pupils equal; superficial reflexes slow, deep reflexes active. No optic neuritis was present throughout; on lumbar puncture clear fluid came out under pressure on two occasions. Nystagmus was noted on one day only. The patient constantly took food well, but irritability and head-retraction steadily increased. After October the 2nd there was some vomiting for the first time since admission, and on the 16th convulsions occurred and the patient died.

The diagnosis during life was occluding meningitis, but post-mortem a large tumour was found growing backwards from the upper aspect of the middle lobe of the cerebellum. There was also great dilatation of the ventricles. Microscopic sections (by Dr. Leonard Parsons) showed the tumour to be a round-celled sarcoma.

December the 13th, 1911.

Congenital Heart Disease.—Dr. SAWYER showed a girl, aged 4 years and 3 months, who was very undersized and presented marked cyanosis and clubbing of the fingers and toes. The cardiac apex was half an inch external to the left mammary line, and the cardiac dulness extended above to the third left costal cartilage, and about one and a half inches to the right of the sternum. There was no thrill. A loud systolic murmur could be heard all over the præcordia, and the point of maximum intensity was over the third left costal cartilage. The murmur was conducted up into the neck and towards the left clavicle. The second pulmonary sound was diminished. The red cells number 12,000,000 per c.mm. On examination of the eyes, the veins appeared very large, and there was a loss of colour contrast between the arteries and veins.

Polio-encephalitis.—Dr. WALTER JORDAN showed a girl, aged 2 years and 5 months. Previously to October the 2nd she had been in perfect health. She was able to walk when thirteen months old, talked at an early age and very well, and generally was regarded as a very intelligent child. On October the 2nd she had a fit, and for the next three days was unconscious. For ten days she rolled her head from side to side; on the sixth day of the disease she screamed all day, and the next day she spent standing up in her cot and biting at everything. On October the 12th she became unable to stand at all. When seen on October the 14th she could not stand, and could just sit up for a few moments at a time; was able to move her legs and had a tendency to keep them drawn up, moved her arms, and kept her hand up to her mouth, seized objects and carried them to her mouth. There was no muscular wasting or localised flabbiness, but a general flaccidity; no muscles showed any special weakness. The knee-jerks were brisk. The child made continuous crying and babbling noises, but could not speak. When shown, the child had become able to run about freely, but had not recovered speech, still making in

articulate noises only. She was always in mischief, getting hold of everything she could reach, and had lost all the ideas she had before her illness of the nature of objects.

Hemiplegia in a Case of Chorea.—Dr. WALTER JORDAN showed a girl, aged 6 years, who had had chorea for seven weeks before admission to hospital on November the 11th, and who one week before admission suddenly became unable to speak or move her right arm and leg. She had a definite severe hemiplegia, quite distinct from ordinary choreic paresis; incomplete facial paralysis, complete paralysis of right arm and leg; right knee-jerk exaggerated; right ankle clonus and extensor plantar reflex. She had signs of endocarditis. Speech was returning to a slight extent by the time the case was shown, but there was no movement of the right limbs.

Philadelphia Pediatric Society.

February the 13th, 1912, THEODORE LE BOUTILLIER, M.D., President

STUDIES IN THE DIGESTION AND NUTRITION OF INFANTS.

Dr. MAYNARD LADD, of Boston, read this paper, by invitation. After showing a large number of lantern charts of cases treated in the out-patient service, he stated that as a result of the study of eighty-two infants with varying grades of indigestion and malnutrition, it was evident that many atrophic infants could be educated to take higher fat percentages than were ordinarily given, with satisfactory results in weight development. The average rate of gain in atrophic and undeveloped infants who were fed upon whey mixtures with lactose for prolonged periods was 18 oz. per month. When malt sugar was substituted for milk sugar in these mixtures, the rate of gain was increased to $22\frac{2}{3}$ oz. per month, or an increase of 26 per cent. Two series of infants were fed upon plain cream mixtures with barley starch, and the excess of sugar was supplied in the form of maltose (maltose and dextri-maltose). In one group the mixtures were not pasteurised; in the other group the food was superheated to 212° F. for twenty minutes. The rate of gain in each group was the same, that is, $21\frac{1}{4}$ oz. per month. Boiling the milk did not in any way lessen its nutritive qualities. The possibility of scorbutus was guarded against after several weeks of feeding by small doses of orange juice. Individual cases often did better upon the superheated than upon the raw milk. With an occasional exception, the infants did not make satisfactory gains in weight until the energy quotient was raised to from 140 to 160, and sometimes to from 175 to 190. Generally speaking, the energy quotient was greatest when the weight development was farthest from that of the average normal infant, as determined by the weight chart. The quantity of food to be given an atrophic infant was only a little less than that which the normal infant of the same age received, and was often from $\frac{1}{2}$ to 2 oz. more than would be given to the normal infant of the same weight. The detailed study of the weight and feeding charts in a large series of cases showed great variations in individual requirements, and the impracticability of applying general rules of feeding to the atypical and difficult cases.

Dr. S. McC. HAMILL considered that Dr. Ladd had struck the keynote of teaching infant feeding when he had said that it was impossible to teach general principles of infant feeding which would cover every case. The problem was to feed the individual infant; and it was also individual in that the physician advising the feeding studied his results upon that individual baby. It was the individual infant who had to be fed, and the application of a special food to the special infant was the ultimate object of their work. Dr. Hamill had had success with relatively low fats and relatively high proteids with slightly lower sugars than Dr. Ladd had used.

Dr. E. E. GRAHAM said that, in the study of the nutrition and digestion of infants there were certain broad principles to be followed. It was necessary first of all to understand normal gastric and intestinal digestion in the infant; one should appreciate that in the stomach the proteid was at least partly converted into peptones; that sugars, salts and proteid were absorbed slightly from the stomach; that the younger the child, the more quickly did the stomach empty itself, and the higher the proportion of fat in the food, the more slowly did the stomach empty itself. In the intestine one should appreciate that the pancreatic juice acted on the proteid carbohydrates and fats, and that there was a rapid absorption of proteid and fats from the small intestine, while absorption from the large intestine was poor; from the latter very little fat was absorbed, although sugar, salts and peptones might be absorbed. One should also appreciate exactly what part the different elements of food played in the nutrition and heat functions of the body. One should try to decide whether the stomach or intestine or both were involved. Many cases of malnutrition presented no actual change in either the stomach or bowel. If possible one should decide what element or elements of the food were not being digested, and in feeding the baby one should try to make up the deficiency in one element by an added quantity of another. The individual child must be studied in each case. In the study of the stomachs of the patients Dr. Ladd showed in X-ray pictures, one must remember that these were not healthy children, that they had not normal stomachs, and that the gastric contents did not leave such stomachs at normal periods. Moreover many of these infants, as they were cases of malnutrition, might have had dilated stomachs.

Dr. ALFRED HAND, jun., said that Dr. Ladd had presented an interesting subject in a very interesting way, one reason for the interest attached to infant feeding being that any given infant was not going to thrive on any given mixture simply because some other infant had, as was well illustrated by the chart of the case in which it was necessary to use milk sugar instead of maltose. Dr. Hand was glad to see that the principles that had guided him in endeavouring to meet the needs of different infants were fundamentally the same as Dr. Ladd's, the main differences being that Dr. Ladd started with somewhat lower percentages. In some cases which gained very slowly, one did not always have to consider the time as necessarily lost if the infant was comfortable; for a time might soon be reached, especially with under-feeding a little, when the digestive organs had had sufficient rest, and then an increase in the strength of the mixture was followed by rapid gain. Dr. Ladd was fortunate in his term of service in the hospital, the cooler autumn months, for during the hot months in Philadelphia it was often impossible to make some infants gain, but after the middle of August, when the nights usually began to get cooler and better sleep was obtained, more satisfactory progress was made.

Dr. D. J. MILTON MILLER, of Atlantic City, said that the great thing in

infant feeding was to nourish the infant, not to feed it. Because this was forgotten, much trouble ensued. Dr. Miller had not been so successful as Dr. Ladd in giving fat to atrophic infants. They seemed to do better with relatively high proteids and maltose. One would gather from Dr. Ladd's remarks that he fed infants with fat regardless of the stools. Dr. Miller had not been successful in doing this until the indigestion was corrected. Some of the troubles of feeding were due to impure milk sugar. Through Dr. H. L. Coit's efforts a pure milk sugar of the fourth crystallisation was now obtainable. Dr. Miller had not been satisfied with caloric feeding according to the accepted standard; not only did atrophic infants require high calories, but healthy infants, if fed according to the caloric requirements supposed to be suitable to their age, would, he found, be constantly hungry and crying for more food.

Dr. LADD, in closing the discussion, said that while he started these infants upon low fats, for about two months, these were later increased gradually to between three and four per cent. He always noted the condition of the bowel movements, except in cases of starvation diarrhoea, when he absolutely disregarded them. He agreed most heartily with the view that the same result could often be secured by different methods of feeding. The important point was to get results, and this could generally be accomplished by intelligent and diligent study of the individual requirements of each infant.

Société de Pédiatrie, Paris.

December the 12th, 1911. (Bulletin No. 9.)

Prolonged Cerebro-spinal Meningitis in an Infant ; Intra-cranial Hypertension ; Craniectomy.—MM. P. NOBÉCOURT and SEVESTRE read notes of the case of a boy, aged 7 months, breast-fed by his mother, who was in good health. On admission there were symptoms of a febrile gastro-enteritis, which did not yield to treatment; nuchal rigidity and slight myosis were noticed eleven days later. Lumbar puncture confirmed the diagnosis of meningococcic cerebro-spinal meningitis. Intra-spinal injections of 130 c.c. and subcutaneous 30 c.c. of Dopter's serum were inefficacious. After a month there appeared signs of hydrocephalus and basal meningitis with intra-cranial hypertension. The child died a few hours after a decompressive craniectomy by M. Broca. The autopsy confirmed the diagnosis.

Large Congenital Serous Cyst of Neck. MM. DEMELIN and ALBERT MOUCHET showed a girl who presented from birth a cyst in the subclavicular region the size of a large orange. She was operated on on the twenty-second day.

Scarlatina complicated by Left Hemiplegia followed by Typhoid Fever complicated by Intestinal Hæmorrhage.—M. H. LEROUX related the case of a boy who, on the eighth day of a normal attack of scarlatina, had pains in the wrists with cardiac symptoms and severe headache. On the seventeenth day there was paresis of the lower limbs and later on complete paralysis of the whole of the left side. There was no

albumin. On the forty-fifth day epistaxis occurred with intestinal disturbance and fever. Widal's reaction was positive. Death occurred from intestinal hæmorrhage.

Two Cases of Intussusception.—Dr. P. GRISEL related these, and remarked that from the point of view of diagnosis there were three varieties of such cases: (1) *Ileo-cæcal* invagination, in which the head of the invagination corresponded to Bauhin's valve, and was accompanied by progressive involvement of the ascending and transverse colon sometimes as far as its left flexure. In this variety the tumour could only be felt at the onset, when it was small, on the right side, but as the invagination increased it became deeper, less movable and less palpable. There was a moderate amount of bloody discharge and thick mucus. This was the most frequent variety in the infants below the age of one year and constituted 82 per cent. of the cases. (2) *Ileo-colic* invagination, characterised anatomically by the progressive return of the ileum through the ileo-cæcal valve which formed a fixed ring, strangling the pedicle of the invaginated mass which was free in the cavity of the ascending colon. Here the tumour, which might be large, was situated in the right iliac fossa, and remained movable like the cæcum and the ascending colon which contained it. The bloody discharge was no longer limited to a certain amount of mucus, but took the form of a bloody serum coming in gushes. It occurred in 11 per cent. of infants. (3) *Enteric* invagination, confined to the small intestine. The tumour was small, mobile, difficult to palpate owing to extreme abdominal distension. The bloody discharge was moderate, but often mixed with fæcal matter and pure blood having an offensive odour. It occurred in about 5 per cent.

Observations on Intestinal Invagination.—M. OMBRÉDANNE, commenting on Dr. Grisel's cases, said that four types existed: (1) Those cases in which the gut could be felt *per rectum*. (2) Those where the gut occupied the subumbilical region, corresponding to the direction of the transverse colon. (3) Those where the gut could be felt to go back under the influence of an enema. (4) Those in which the clinical course was chronic or subacute, and where fæcal matter continued to pass some time after the appearance of vomiting.

General Œdematous Sclerodermia (Besnier's Scleremia).—MM. APERT and LEBLANC reported the case of a boy, aged 14 years, in whom the onset was extremely rapid. This disease was exceptional in children. Improvement took place under thyroid administration.

Tuberculous Spina Ventosa of the Tibia.—M. ANDRÉ TRÈVES showed a girl, aged 5 years, cured of this condition. The large cavity filled with surprising rapidity under injections of iodoform and ether.

Craniotabes and Syphilis.—Dr. J. ROUX, of Cannes, gave brief notes of eighteen cases. In one only could hereditary syphilis be imputed as a cause. In another case there was splenic hypertrophy which might have been syphilitic.

Latent Thymic Hypertrophy.—M. D'OELSnitz described the case of a boy, aged 11 months, who died suddenly without apparent cause and without symptoms except slight dyspnoea and cyanosis. He discussed the signs by which such cases may be diagnosed.

The Radioscopic Shadow in Cases of Thymic Hypertrophy.—The same author contributed a paper on this subject.

VINCENT DICKINSON.

Abstracts from Current Literature.

Medicine.

Examination of sputum in children (*Gazz. Med. Ital.*, 1911, LXII, p. 411).—**S. Riva-Rocci**, recognising that most physicians consider the examination of a child's sputum to be impossible, has devised a method to overcome the difficulty, which obviates the necessity of passing a swab into the larynx. He began to practise his method in 1897, and after an extensive trial, has now decided to publish it. He uses a glass plate, 8 by 12 cm., set in a nickle frame, from which it can easily be taken; the frame has a conveniently curved handle. The plate placed in the frame has both its surfaces free, and a ledge in the frame allows it being laid on the table or in a box without touching. The author also uses a collector, devised to gather up the deposit on the plate and convey it to a microscope slide, consisting of a metal handle, having at one end flat forceps blades, the size of an ordinary glass slip. Between these blades there is a thin strip of rubber $\frac{1}{2}$ mm. thick, projecting about 2 mm. from the edge of the blades. With these instruments the procedure is as follows: The plate, previously sterilised, is placed in its frame; every time the child coughs the nurse holds the plate in front of its mouth, about two inches from the lips, in such a way that its centre corresponds to the buccal aperture, and keeps it there during the fit of coughing; the plate is then replaced in its box, and the procedure repeated every time the child coughs. Both sides of the plate may be exposed to the child's mouth. After a sufficient time, generally about half a day, the plate is taken out for examination, the collector is cleaned and moistened with sterilised water, and its rubber end used to clean up every part of the plate. The material collected is conveyed to a glass slip, dried, fixed, and coloured, and then examined. In this way the author has examined many cases, demonstrating thereby the organisms found in children's sputum. In the differential diagnosis between pulmonary tuberculosis and simple bronchitis it has afforded him valuable aid. The method is very simple, and years of trial have convinced the author of its practicability.

VINCENT DICKINSON.

Spasm of the larynx in broncho-pneumonia (*Rev. de Méd.*, 1911, *Lépine Jubilee number*, p. 865)—**E. Weill** regards spasm of the larynx in broncho-pneumonia as due to the co-existence of two factors of equal importance—a laryngeal lesion and hyperexcitability of the nerve centres. The latter accounts for the frequency of the phenomenon in the first two years of life. The present cases occurred in children aged twenty-six months, two and a half years, and three years respectively. Unlike Variot, in whose case the larynx was normal (*v. BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1911, viii, p. 137), Weill found œdematous infiltration of the larynx in two, and in the third ulceration and abscess.

J. D. ROLLESTON.

Small bronchial dilatations in children (*Gazz. Med. Ital.*, 1911, LXII, p. 133).—**Hutinel** maintains that this condition is more common in children than would be inferred from the text-books, but it gives rise to little secretion, which is rarely purulent. The most frequent antecedent is a severe infection complicated by broncho-pneumonia of long duration, generally measles, but frequently influenza, diphtheria, typhoid and scarlatina. Other causes are pleuritic adhesions, presence of foreign bodies, stenosis of the respiratory tract, especially when caused by mediastinal adenopathy. These bronchial dilatations are hardly ever tubercular; they form, however a good soil for infection; they are frequent in children with imperfect nasal respiration, subject to constant and tiresome cough. Hereditary syphilis is another important ætiological factor. These lesions are met with especially in the posterior inferior part of the lung. Autopsies show adhesions, emphysema anteriorly, a thick creamy secretion, and dilatations varying from the size of a pea to that of a nut, variable in number, either single or in clusters. Sometimes the dilatations are cylindrical. The mucous membrane at first remains red, then becomes greyish, and lastly almost unrecognisable in old lesions. The muscular and cartilaginous layers are destroyed, and a sclerotic tissue rich in small round-cells is substituted for the normal bronchial tissue; the sclerosis also invades the surrounding pulmonary tissue and neighbouring pleura. Generally the bronchiectasis develops later when the child seems already recovered from the complaint, and it often happens that an accidental examination reveals the disproportion between the apparent well-being and the objective local symptoms. When the patient is under observation these facts can be ascertained, but usually the condition remains latent, and its discovery is due to some common intercurrent pulmonary affection. These signs may lead to error in diagnosis unless properly interpreted. Generally there is fever with large fluctuations, rapid pulse, and tiresome cough, which in older children may be accompanied by copious expectoration. There is moderate dyspnoea. The thorax may be retracted. Bronchial breathing, small bubbling and large resonant râles may be heard. The disease may last for months, giving rise to a suspicion of tuberculosis. The lesion does not always remain localised, but may extend even to the pleura. Pulmonary gangrene and purulent pleurisy are, however, rare. Sometimes pseudo-rheumatism, arthropathy, endocarditis and cerebral attacks are noticed. Alterations in nutrition may supervene, and imperfect thoracic development, which predisposes to tuberculosis or chronic bronchitis. These cases of bronchiectasis have intermissions and exacerbations; during the intermissions it is difficult or impossible to diagnose the bronchiectasis. Differential diagnosis has to be made with tuberculosis, and is made with difficulty when the lesion is at the pulmonary apex. Prognosis in children is not so serious as in adults, since the developing lung improves the condition. Such children, however, are prone to tubercle. Acute dilatation gets well without leaving any traces; when, on the other hand, there is much sclerotic tissue formed, complete cure does not result. For treatment, wet packs and tepid baths, benzoate of soda and balsams are useful. The cardiac condition may require injections of camphorated oil or digitalis. During the intermissions respiratory exercises, breathing compressed air, open-air treatment, and sulphur waters are recommended.

VINCENT DICKINSON.

Small bronchial dilatations in childhood (*Rev. de la Soc. Méd. Argent.*, 1911, XIX, p. 305).—**M. Acuña** and **J. C. Navarro** think that

many children regarded as tuberculous have really only had broncho-pneumonia followed by bronchial dilatation, and that small bronchial dilatations are far from rare in children. Their site of predilection is the base of the lungs, especially of the left, and they usually involve the small and medium-sized bronchi. Their shape is most frequently cylindrical. In most cases they are associated aetiologically with broncho-pneumonia produced by various infective agents, *e.g.* inherited syphilis, whooping-cough, measles, diphtheria, typhoid fever, and smallpox. The diagnosis rests on the slight degree of dyspnoea, the absence of fever, the general condition, and the abundance of the expectoration. The prognosis is usually good, but the patients are especially liable to infections of the respiratory system. Two illustrative cases are recorded in boys, aged 2 and 12 years respectively.

J. D. ROLLESTON.

Chronic bronchiolectasis (*Jahrb. f. Kinderheilk.*, 1911, LXXIV, p. 627).—H. Vogt mentions a case to show that severe acute or long-existing broncho-pneumonia leaves behind structural changes in the wall of the small bronchi with dilatation of the bronchi. A focus is thus provided, from which new broncho-pneumonic disease takes for predilection its origin. As a result of advance of the inflammatory process to the larger bronchi dilatation of them takes place and thus advanced bronchiectasis results, which frequently ends in death, but a number of years may pass before this occurs. The author considers that drugs have little influence on the disease, and that the best treatment is a mechanical and surgical one.

F. R. B. ATKINSON.

Asthma in children (*Arch. de méd. des enf.*, 1911, xv, p. 721).—J. Comby briefly records seventy-five cases in children, in fifty-six of whom the attack started in the first three years of life. Forty-three were boys, thirty-two girls. In twenty-one there was asthma in the parents, in sixteen in the grandparents, and in three in the great-grandparents. The ascendants or collaterals frequently showed signs of arthritism, under which term are included migraine, diabetes, gout, obesity, gravel, eczema, neuralgia, etc. Familial asthma occurred in three cases. In two pairs of twins one child was affected with asthma, and the other was free from it. Infantile eczema had preceded asthma in twenty-eight cases, thus illustrating the close connection between two manifestations of the arthritic diathesis. True asthma is never caused by nasal affections, adenoids or glandular tuberculosis. The exciting causes of asthma are numerous, such as chill, fatigue, violent games, emotion, or acute disease. The onset is insidious. In some children the attack is characterised by violent and repeated sneezing (nasal asthma). Many nervous or arthritic symptoms may be associated with infantile asthma, *e.g.* laryngismus stridulus, spasm of the glottis, convulsions, obesity, urticaria, and oxaluria. The first attack is difficult to diagnosis. Broncho-pneumonia almost always suggests itself, but fever is absent or slight, and in twenty-four hours the child is out of danger. Other diseases which must be eliminated are spasm of the glottis, laryngismus stridulus, and stridor due to an enlarged thymus. The prognosis of asthma in children is not so grave as in adults. As the child grows up the attacks become less frequent and disappear entirely at puberty or in adult life. Complications, *e.g.* emphysema, bronchiectasis or chronic bronchitis are rare. Treatment consists in application of mustard plasters and dry cups, and sedatives, such as opium, belladonna, or aconite. Dover's powder is recom-

mended. Prophylaxis should be attempted by change of air (residence at Mont Dore or La Bourboule), baths and douches, vegetarian diet, and the exhibition of such drugs as arsenic, potassium iodide and sulphur.

J. D. ROLLESTON.

Pneumonia of the right apex, lasting twenty days; typhoid state; mutism; cure (*Arch. de méd. des Enf.*, 1912, xv, p. 123).—**J. Comby**.—A boy, aged $10\frac{1}{2}$ years, was attacked by influenza and glandular fever; examination of the urine revealed acute nephritis. These phenomena lasted eighteen days and then began to decline, when the thermometer rose to 104.8° and 105.8° F. Auscultation revealed pneumonia of the right apex, which gradually spread to the base. The temperature remained about 104° F. without remission for twenty days. The pulse varied between 130 and 150 per minute. The patient passed into a typhoid state, and became both deaf and dumb and quasi-idiotic, which state lasted for more than fifteen days after defervescence, which occurred on the twentieth day. A bed-sore formed on the outer side of the right foot, and icterus occurred towards the end of the disease. After defervescence right otitis occurred. On the twelfth day of the disease meningeal symptoms in the form of stiffness of the limbs were manifested. Death was considered probable on many occasions, but the patient ultimately recovered, thanks, the author thinks to the capability of digesting all the fluid (milk and water) given him. The author had never seen such a serious case in a child recover before.

F. R. B. ATKINSON.

Hæmorrhagic pleurisy in a girl, aged $2\frac{1}{2}$ years (*Arch. de méd. des Enf.*, 1912, xv, p. 125).—**J. Comby** describes a case in which on two occasions 200 gm. and 180 gm. respectively of hæmorrhagic fluid were removed from the chest. The patient ultimately died, and on post-mortem examination a small celled sarcoma was found originating in the thymus-gland.

F. R. B. ATKINSON.

Left pleurisy with excessive effusion and syncopal phenomena (*Gaz. des Hôp.*, 1911, LXXXIV, p. 1303).—**M. L. Baumel** describes this case in a girl, aged 15 years, and finds that the syncopal attacks as well as an enlarged spleen and albuminuria are due to dilatation of the right heart. In the case recorded a litre of sero-sanguineous fluid was removed from the chest, and absorption of the remainder took place with a perfect cure.

F. R. B. ATKINSON.

The diagnosis of pleuritic effusions in infancy (*Arch. of Pediat.*, 1911, XXVIII, p. 28).—**D. J. M. Miller**, in consequence of the extreme frequency of purulent pleural effusions in children and the danger of the condition in infants under six months, lays stress on an early diagnosis. Though the child usually looks ill there is no correspondence between the general symptoms and physical signs; an infant may not appear very ill, yet the chest may be full of pus. The physical signs of pleural effusion in infancy differ materially from those met with in adults, their peculiar character being due to physical conditions for which, as yet, no adequate explanation has been given. Displacement of the heart's apex is one of the most reliable signs that we possess, and is very commonly present, except when the amount of effusion is quite small or localised; but adhesions may prevent its occurrence and the apex may be actually displaced to the left in a left-sided effusion.

Vocal vibrations may be well marked or seemingly increased, even over large collections of fluid. Next to exploratory puncture, dulness on percussion in infants may be the most reliable sign of fluid that we possess; with a dulness there is an increased sense of resistance to the percussing finger, which is highly characteristic. Râles, both friction and bronchial, may be heard over very large effusions, not only above, but also below the level of the fluid, hence their presence should not exclude an effusion. Localised and sacculated empyemas are extremely puzzling and difficult of diagnosis; exploratory puncture must frequently be resorted to in order to establish their existence, and is the decisive and only absolutely sure means of diagnosis. He refers to the editorial in the *BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1905, II, p. 466, warning against the routine use of the syringe; yet, notwithstanding the rare accident of a fatal issue on puncturing, the disastrous results of unrecognised empyema may make it imperative, if after careful and repeated examinations the diagnosis is still in doubt.

J. E. BULLOCK.

Case of mediastinal cyst (*Arch. of Pediat.*, 1911, XXVIII, p. 194).—**A. D. Blackader** and **D. J. Evans** record a fatal case in a male infant, aged 9 months, in whom death was due to compression of the trachea. The symptoms started when the child was seven months old with sudden attacks of dyspnoea. An area of dulness was found at the upper part of the chest, extending 3 cm. to the right and 2 cm. to the left of the median line and 5 cm. downwards from the episternal notch. During expiration a firm body was palpable above the left sterno-clavicular joint. The diagnosis of enlarged thymus was made during life. At the necropsy a globular unilocular cyst was found behind and to the left of the trachea. The wall was composed of muscular and fibrous tissue and the inner surface was lined by columnar ciliated epithelium. The writers think the cyst arose from a partial persistence of the original fistulous communication between the trachea and œsophagus.

J. D. ROLLESTON.

Chronic mediastinitis in children (*Arch. de méd. des Enf.*, 1912, xv, p. 52).—**J. Comby**.—Sucklings are rarely affected. The disease principally attacks older children; girls are affected as often as boys. It is frequently due to hereditary syphilis or tuberculosis; rheumatism, scarlet fever, pertussis, anthracosis, and traumatism have all been mentioned as causes. The normal tissue is transformed into hard fibrous tissue, encircling the vessels and nerves. The liver is enlarged. The onset and progress are insidious, and the symptoms vague; deformities of the thoracic wall and dulness over the affected region have been noted. If pressure occurs on the bronchi, trachea, œsophagus, nerves and vessels, symptoms associated with this pressure arise. Three forms can be clinically distinguished: (1) Mediastinitis without participation of the pleura and pericardium; (2) mediastinitis with implication of the pleura; (3) mediastinitis with implication of the pericardium. The first form is the rarest, the third the commonest. The prognosis is very grave in the child because tuberculosis is so frequently present (eighteen deaths out of twenty-five cases). The treatment consists of good hygienic conditions, rest, fresh-air, good food, cod-liver oil, syrup of phosphates, iodotannin. If syphilis be suspected, injections of a solution of biniodide in water and "606" are recommended. Resection of many of the ribs on the left side has been practised.

F. R. B. ATKINSON.

Tuberculosis in children (*Brit. Journ. of Tuberculosis*, 1912, vi, p. 19).—**Woods-Hutchinson**.—The frequency of pulmonary tuberculosis in children is much greater than was formerly supposed. The lung is the most frequent site of tubercular involvement in children, as in adults; whatever the port of entry, the lung suffers most severely as well as most frequently; instead of tuberculosis having a special preference for the bones, joints and glands in childhood, the tuberculous process in these regions would appear to be secondary to the involvement of the lung and to represent a residual stage of a generalised infection. Even the glandular forms of tuberculosis do not represent an earlier or milder form of the infection, but are secondary to a pulmonary involvement. The moderate, but appreciable degree of immunity to pulmonary tuberculosis possessed by children who have manifested osseous, articular, or glandular forms of the disease is possibly to be interpreted by the theory that they have already survived a considerable degree of pulmonary involvement. Such immunity as may be acquired by civilised races is probably the result of survival of attacks of the pulmonary form of the disease in childhood. J. E. BULLOCK.

Frequency of consumption in children (*Birm. Med. Rev.*, 1912, xix, pp. 57 to 67).—**J. E. H. Sawyer** says that consumption as it occurs in adults is one of the rarest of all affections in children, and comments on the great discrepancy of the figures published in the annual school medical reports. The future and post-mortem records do not reveal the error to be on the side of the sceptics. In 850 autopsies evidence of healed tubercle was found in 7, and clinically 1 in 1175 children examined. Tuberculosis of the lungs in paediatric practice is found to be either a tuberculous bronchopneumonia or part of a generalised infection. Difference in opinion arises from the interpretation of signs found, such as tubular breathing or impairment of breathing at one apex, and from the fact that in debilitated and rickety children transient areas of dullness are observed, due to portions of the lungs not acting to their full extent, by a bronchus being plugged with secretion. Much of the supposed consumption is the chronic bronchial catarrh due to enlarged tonsils and adenoids. Chronic coughs are not due to tuberculosis of lungs, which usually kills in under a year, but to nasopharyngeal disorder and a mild form of bronchiectasis especially common after whooping-cough. CHRISTOPHER ROLLESTON.

Intra-thoracic tuberculosis in children (*Amer. Journ. of Obstetrics*, 1912, lxxv, p. 335).—**Ager**, from a study of 125 cases, summarises his conclusions as follows: There are no data at present to indicate how general pulmonary tuberculosis is among children. It is possible, with reasonable certainty, to make a diagnosis of thoracic gland tuberculosis in children before the lungs are affected. In the pre-pulmonary stage the prognosis is fairly good at all ages in children. In pulmonary infection the prognosis depends to a considerable extent on the age period, being best between five and eleven years. During the period of sex development the prognosis is about three times as bad among girls as among boys. Success in treatment depends more upon twenty-four hours in the open air than upon everything else. Tuberculin is distinctly beneficial in certain selected cases.

J. E. BULLOCK.

Tuberculous tracheo-bronchial glands in children (*Thèses de Paris*, 1911-12, No. 16).—**Barbe-Oberlin**, from an observation of 42 cases,

concludes that enlargements of the tracheo-bronchial glands are almost always the initial clinical manifestation of tuberculosis in the child. It is important to make an early diagnosis, but this diagnosis is extremely difficult to establish: irregularities of temperature and emaciation are important accompaniments, but they will not suffice to settle the point. A large number of the signs obtained by auscultation and percussion are not above criticism, they are often merely subjective. X-ray methods alone appear capable in a large number of cases of giving absolute certainty. Swellings either too small or too deeply situated to afford certain signs by percussion or auscultation are depicted on the screen; at other times the radiographic shadows give indisputable evidence. In the case of peribronchial glands a positive result is of absolute value, but a negative result allows of doubt. Although enlargement of the tracheo-bronchial glands in children is tuberculous, in the great majority of cases one must always use von Pirquet's test, which gives certain evidence of the real nature of the lesions. If the reaction is negative and remains negative on repetition, we can almost certainly exclude tuberculosis. X-ray methods and the interpretation of shadows are open to further developments, but they give us useful indications. Every clinical examination of a patient suspected of enlarged tracheo-bronchial glands is incomplete if it is not accompanied by an X-ray examination and a cuti-reaction to tuberculin.

J. E. BULLOCK.

The general and local reaction to tuberculin in children (*Gazz. Med. Ital.*, 1912, LXIII, p. 43).—Péhu prefers the intra-dermic reaction of Mantoux, using a solution of 1 in 5000. He practised it in over 500 cases of various diseases. In pulmonary phthisis it is always positive in the early stage, for the most part negative in advanced forms with excavations, especially when there is intense cachexia. The ophthalmo-reaction was often positive on the other hand even in these cases. In general diseases, such as typhoid, rheumatism and syphilis, the intra-dermic reaction was often positive. In hereditary syphilis, however, the author did not obtain a positive reaction. He is of opinion that in the present state of our knowledge we cannot deny the specificity of the reaction. However, admitting, with some authors, that the cuti-reaction and intra-dermo-reaction demonstrate the presence of an old or recent focus, either active or extinct, encapsuled or calcified, and that the ophthalmo-reaction only shows active tuberculosis in an advanced stage, it is, nevertheless, not possible to assign to these methods an important position in clinical work, because they give no indication as to the site of the lesion, but only indicate that in the symptom-complex one of the factors is tuberculosis. The results obtained by this method, however, are very valuable in early infancy. Some observers wish to attribute to the local reactions a value of probability in the prognosis of tubercle, but the author thinks it impossible to avoid error in forming a judgment between active and quiescent tubercle. He concludes that further research is still requisite to ascertain its exact clinical value, two points deserving special attention, namely, the pharmaco-dynamic unification of tuberculins, and the correct solution of the problem of their specific action on the tissues and on the organism.

VINCENT DICKINSON.

A study of local reactions to tuberculin (*Arch. de méd. des enf.*, 1911, xiv, p. 925).—Rozenblat, as a result of observations on 129 infants, aged 2 weeks to 14 years, concludes that there is no constant

connection between the sensitiveness of an organism to tuberculin and the extent of the tuberculosis, neither is there any relation between the local reaction and the clinical form of the tuberculosis; at the most, one can assert that a cachectic reaction corresponds to an advanced tuberculosis and a torpid reaction to a latent focus. By a cachectic reaction is meant a reaction of faint colour, often merely a livid patch, with little or no infiltration, and by a torpid reaction is meant a reaction which takes more than twenty-four hours to develop. For the cuti-reaction (von Pirquet), pure tuberculin of the Pasteur Institute was used, and a hundredth solution for the intra-dermic reaction of Mantoux (a modification of the puncture reaction of Hamburger).

J. E. BULLOCK.

Prognosis in tuberculosis of infancy (*Monats. f. Kinderheilk.*, 1912, x, p. 531).—**H. Hahn** states that the prognosis is worse the earlier the period in which infection occurs, especially if in the first year of life, and depends on the source and nature of the infection. Repeated and constant infection is unfavourable, and perhaps the virulence of the bacilli. Illegitimacy favours the occurrence and course of infection; bad hygiene and acute infectious diseases adversely affect the prognosis. Children without fever in whom the body-weight improves and in whom the process in the glands is limited often survive. Cases in which tuberculosis occurs in the eyes, glands, bones or joints, have a good chance of life. Infants with a tendency to generalisation and with affection of internal organs, especially the lungs, do badly. Breast-feeding has no distinct influence on the course and prognosis of infantile tuberculosis.

J. E. BULLOCK.

Herpes zoster and tuberculosis (*Progrès Méd.*, 1911, 3 sér., xxvii, p. 361).—**H. Barbier** and **C. Lian**.—Zoster may occur at the onset of pulmonary tuberculosis, in which case it will confirm the diagnosis, and indicates an infection of the nervous system, or it may be the first sign of a hitherto unsuspected tuberculosis. The writers record five cases in which zoster was followed within a few months by tuberculous meningitis. They do not, however, regard all cases of zoster as tuberculous, as they had a case in which the cerebro-spinal fluid, although showing a lymphocytosis, did not infect a guinea-pig.

J. D. ROLLESTON.

Herpes zoster, a sign of a latent tuberculosis (*L'Echo Méd. du Nord*, 1912, xvi, p. 37).—**Pierret** and **Boquillon** believe that some cases of zona are symptomatic of latent tuberculosis, especially the thoracic cases. They quote ten cases, three of which are children, in which tuberculosis was either present at the time of examination or developed within a year. They also consider that the development of herpes in a tubercular individual gives a bad prognosis to the case.

J. PORTER PARKINSON.

Erythema nodosum and tuberculosis (*Bull. Soc. Sci. Méd. de Bucarest*, 1909-10, p. 171).—**S. Constantinesco** records four cases in children, aged from four and a half to seven and a half years, suffering from erythema nodosum. All showed a positive cuti- or intra-dermo-reaction. Two had previously had paroxysmal cough, associated with enlarged tracheo-bronchial glands. One child, a month after recovery from erythema nodosum, developed symptoms of tuberculous meningitis and died.

J. D. ROLLESTON.

Tuberculin in the treatment of tuberculosis in children (*Jahrb. f. Kinderheilk.*, 1912, LXXV, p. 166).—**Wittich** records his experiences in sixty cases. Koch's old tuberculin was used, the initial dose being $\frac{1}{1000}$ mgrm. The children, whose ages ranged from two and a half to fourteen years, attended the clinic twice a week, and the mothers were instructed to fill in a form recording appetite, cough, pains, night-sweats, general condition and the action of the bowels. The weight was taken once a week. Usually about thirty injections were given, by gradually increasing doses up to 3·0 mgrm.; the injection was made in each forearm alternately with the usual aseptic precautions. No injection was given if the temperature was over 37·5° C. Cases of open tuberculosis or bone tuberculosis were not treated. In the first group of cases were children of a "scrofulous" type, *i. e.* flabby, pasty children with pale faces, red and swollen eyelids, nasal discharge, thick upper lip, and cracks at the angles of the mouth—in whom no improvement could be brought about by general hygiene and medication. In them *v. Pirquet's* test was very positive, and the greater the reaction the better was the result of tuberculin treatment, especially when the smallest doses gave a marked rise of temperature; such rise was only temporary and did not recur. In the "scrofulous" no dose above 3 mgrm. was given. The second group of cases showed the beginning of tuberculosis by physical signs in the chest, while X-rays were used for the detection of enlarged bronchial glands. In some reaction to *v. Pirquet's* test was marked, in others slight; only a few gave no reaction, in these tuberculin treatment was borne badly, but the ultimate result was good. In some cases the temperature rose to 38° C. In this group and in the "scrofulous" children the local reaction in the arm was sometimes severe. Improvement was shown by disappearance of the scrofulous stigmata, improvement in appetite, weight and cough, night-sweats, and the general and local condition.

J. E. BULLOCK.

Treatment.

Use of cold baths in diseases of children (*Canad. Pract.*, 1911, XXXVI, p. 679).—**Newell** considers that many of the diseases of children can be just as successfully treated by baths as by drugs, such as convulsions accompanied by high fever, or many of the sharp febrile attacks of children. The stimulating action on the skin and the consequent reflex action on the heart and respiratory centre, causing an increase in the general blood-pressure, are productive of very beneficial results, and the increased respiration increases the metabolic processes and causes an increase in the amount of hæmoglobin.

J. PORTER PARKINSON.

The effect of the hot-air bath in nephritic children (*La Pædiatria*, 1911, XIX, p. 403).—**G. B. Allaria** made observations on 15 children with nephritis, caused by scarlatina in 7, by tonsillitis in 2, by pneumonia in 1, by diplococcal infection in 1, by whooping-cough in 1, and of unknown cause in 3. The duration of the baths varied from half to one and a half hours, the usual temperature was 40° to 49°. The baths were well tolerated, had a sedative effect on nervous symptoms and a beneficial one on arterial tension. The urine after the bath indicated an improvement in renal activity, increase in the total molecular concentration and also of chlorides and urea. It was noticed that as a rule the blood sediment greatly diminished after the bath.

VINCENT DICKINSON.

Treatment of albuminuria in children ('*Thèses de Paris*,' 1911-12, No. 14).—A Galliot says that a milk diet should not be continued when after a week, or at most a fortnight, no diminution in the albuminuria is obtained. A chloride-free diet should never be employed in albuminuria not accompanied by oedema. Diphtheria antitoxin may always be tried, especially if a previous sore throat is suspected (*vide* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1911, VIII, p. 374). A diet with an excess of chlorides may give good results, especially in young children. Other methods failing, drugs may be employed, especially protoxalate of iron. The thesis contains the histories of twenty-four illustrative cases. J. D. ROLLESTON.

Bromural in the treatment of children's diseases ('*Allg. Wien. mediz. Zeitung*,' 1910, LV, p. 459).—Kraus recommends bromural very strongly as having no undesired or injurious effects and no cumulative action. He has been more satisfied with its use in cases of restlessness at night, and especially in pavor nocturnus. In a child aged 8 years, who was subject to extreme night terrors on the slightest disturbance, for instance, noise or darkness, bromural had an excellent effect. From 0.10 cgm. can be given to sucklings. M. D. EDER.

The limitations to the successful employment of salicylates in rheumatic affections ('*Clin. Journ.*,' 1911, XXXVIII, p. 297).—A. F. Voelcker, in a paper read before the Medical Society of London, gives the results of his own experience in this matter. The chief use of the internal administration of salicylate he regards as for the relief of pain. In some cases aspirin gives better results than sodium salicylate, while the addition of 3 to 5 gr. of potassium iodide to the latter may be beneficial. Joint effusions are markedly benefited by salicylates, but their response to treatment is less rapid than the disappearance of pain. Previous mechanical irritation, as by movement of the joint, renders the treatment by salicylate less effectual. The fever of acute rheumatism is most successfully controlled by salicylate, the normal temperature being reached by the third day, but for the regular swinging temperature of the "rheumatic state" salicylates have proved most unsatisfactory. For rheumatic hyperpyrexia the employment of salicylate is a waste of valuable time. The internal administration of salicylate has no beneficial effect upon nodules or upon the cutaneous manifestations of rheumatism (erythema nodosum included). The drug exerts no benefit upon the course or severity of pericarditis, while by upsetting gastric digestion it may do harm. For chorea no drug is less satisfactory than salicylate. The local application of salicylate relieves the pain in rheumatic pleurisy, pericarditis, "painful heel" and erythema nodosum, but has no effect upon the size of nodules. Oil of wintergreen made into an ointment with lanolin, in the proportion of 1 drm. of the oil to 1 oz. of lanolin, is a useful preparation for local application.

REGINALD MILLER.

^c **The treatment of diabetes mellitus in children** ('*Gazz. Med. Ital.*,' 1910, LXI, p. 475).—M. Lauritzen says that the treatment of this disease in children has much greater chances of success when undertaken in the earliest stages, and for this purpose, when there is a history of glycosuria in the parents or intractable skin disease in the child, he advises an examination of the urine after a test-meal, which consists of 30-50 grm. rice boiled in water, 25 grm. fish, 100-200 grm. potatoes, 25-75 grm. bread, according to

age. In the first and second year of life the author was not able to modify the rapidly progressive course of the disease. He obtained some success in a child of fourteen months with a mixture of milk, cream, water and sugar, equivalent in all to 1000 calories, but a relapse took place, and the child died of coma two months after the commencement of the illness. After the second year in slight cases, the author advises a diet without hydrocarbons and very little albuminoid. The body-weight and the presence of acetonuria must be carefully controlled. Later on gluten bread may be allowed, provided that the daily quantity of carbohydrates does not exceed 40-50 grm., and should be reduced to a still smaller quantity if it is impossible to obtain urine free from sugar. As an example, such a diet for a child four years of age and 17 kgm. in weight would be: 50 grm. roasted fish or ham, 25 grm. of fat, 25 grm. of cheese, two eggs, 200 grm. vegetables or sugar-free fruit, 50 grm. of butter, 80 grm. of aleuronated bread or 100 grm. of gluten bread: altogether 1300 calories, or 77 for every kgm. of weight. In every month there should be some days of pure vegetable diet. If, in spite of this diet, the glycosuria is not suppressed, the hydrocarbons must be still further reduced. When a sugar-free urine is ultimately obtained the diet must not be altered for at least two years, and during this period the child should be carefully watched, in hospital if possible; the quantity of hydrocarbons may then be cautiously increased. Even in cases of moderate gravity the author was able to obtain by dietetic treatment at least a slower progress of the disease, so that he advises it to be continued even if there are signs of acidosis present. By keeping the patient in bed the hydrocarbons and albuminoids can be methodically reduced, while the fats are increased. Every fresh restriction of diet is preceded by a day of vegetable diet, in which the patient is given 400-600 grm. of vegetables free from hydrocarbons, two to four eggs, 50-100 grm. fat, tea, coffee without cream, soda-water. With barley broth, vegetables, and alkalis to diminish the elimination of ammonia, the author thereby reduced the glycosuria to a minimum, and obtained an improvement in the general health of the patients.

VINCENT DICKINSON.

Treatment of congenital syphilis with salvarsan (*Jahrb. f. Kinderheilk.*, 1911, LXXIV, p. 322).—**E. Welde**.—A review of the literature with 101 references. Criticism of each case and of the collected material is left to the reader.

J. D. ROLLESTON.

Salvarsan in congenital syphilis (*Jahrb. f. Kinderheilk.*, 1912, LXXV, p. 56).—**E. Welde** gives the results of treatment by salvarsan in twenty-eight cases of congenital syphilis. In the earlier cases subcutaneous and intra-muscular injections were tried, but as these gave rise to painful infiltrations they were replaced by intra-venous injections, which were sometimes difficult to perform in infants. The average dose was 0.1 grm. and in some cases two or three injections were given. The cases were of different degrees of severity, from snuffles to extensive skin eruptions and visceral lesions. The general condition improved after injection and lesions of skin and mucous membrane healed quickly, but visceral affections, such as enlarged spleen and liver and glandular enlargements, were only improved in a few cases. A case of interstitial keratitis improved after two subcutaneous injections of 0.15 or 0.1 grm. The Wassermann reaction only became negative in one case, but then positive again. No bad effects were observed, and no deaths were attributed to the drug, although five children died a few

weeks after injection from intercurrent affections. The author concludes that the results were good, but not better than can be obtained with mercury and iodides.

C. F. MARSHALL.

Effect of salvarsan on congenital lues (*Arch. of Pediat.*, 1911, xxviii, p. 918).—**L. R. DeBuys** records three cases: (1) Male, aged 2 months, with snuffles, enlarged liver and spleen; Wassermann positive in baby and parents. Mother given 0.5 grm. intra-venously. The child improved and Wassermann became negative in the mother and child. Seven inunctions of mercury were also given to the child. (2) Male, aged 3 days, with snuffles, enlarged liver and spleen. Improvement followed the intra-venous injection of mother with 0.6 grm., but Wassermann remained positive in both. (3) Girl, aged $9\frac{3}{4}$ years, with syphilitic nerve-deafness. No result from treatment. Wassermann still positive.

J. D. ROLLESTON.

Treatment of heredo-syphilis by "606" (*Bull. Soc. Sci. méd. de Bucarest*, 1910-11, p. 66).—**N. Zaharesco**.—After a single subcutaneous injection given to the nursing mother the rash and nasal discharge in the child disappeared and there was a gain in weight, though Wassermann's reaction was positive. In the mother the reaction was positive before treatment, but became negative afterwards.

J. D. ROLLESTON.

Hereditary syphilis treated with salvarsan (*Rev. Soc. méd. Arg.*, 1911, xix, p. 622).—**M. Acuña** and **F. Schweizer** used the indirect method in one case and the direct in seven. In the former the mother was injected intra-venously without any improvement to the child, which rapidly improved, however, with the direct method. The cases treated by the direct method all received neutral intra-muscular injections. The ages ranged from thirty-three days to eight months. The dose varied from 5 to 8 mgrm. per kilo of body-weight. In only one did an abscess form at the injection site. The mortality was *nil*. In every case the drug exercised a rapid action on the skin eruption; papulo-ulcerative lesions dried up in three to five days and rapidly cicatrised; rhinitis was slower in disappearing. As regards visceral lesions, the enlarged liver soon resumed its normal size; the spleen diminished in size more slowly. Improvement of the general condition was more rapid than with mercury. The longest period of observation in any case was eight months. Wassermann's reaction, which was positive in the cerebro-spinal fluid before treatment, became negative afterwards; in some cases a reaction negative before treatment remained so, except in one case, where it became positive.

J. D. ROLLESTON.

Treatment of congenital syphilis by injection of pregnant mother with salvarsan (*Thèses de Paris*, 1910-11, No. 460).—**G. Lorreyte** has collected forty-six cases from literature, including three not hitherto published. The injection, which in almost every case was intra-venous, was made at periods ranging in the different cases from the second to the ninth month of pregnancy. In twelve cases, including the writer's three cases, the child made a good recovery. In three, death of the fœtus occurred *in utero*.

J. D. ROLLESTON.

Treatment of congenital syphilis by administration of "606" to the nursing mother (*Amer. Journ. Obst.*, 1911, LXIII, p. 335).—**H. D. Chapin**.—A male infant, aged 6 weeks, the first child, presented snuffles,

a macular rash on the cheeks and buttocks, and an enlarged liver and spleen. Wassermann's reaction was positive both in mother and child. On December 5 the mother received an intra-muscular injection of 0.4 gm. of "606." Four days after the injection the reaction was only feebly positive, and seven days after the injection negative in mother and child. The syphilitic lesions disappeared, but the child did not survive and died of inanition on December 31. No arsenic was found in the milk on December 28.

J. D. ROLLESTON.

Congenital syphilis treated by administration of salvarsan to the mother ('*Amer. Medicine*,' 1911, xvii, p. 486).—A. L. Wolbarst records an unsuccessful case in a male infant with a generalised papular rash, mucous tubercles in the mouth, and snuffles. The mother was given an injection of 0.5 gm. salvarsan when the child was twelve days old. Two days after the injection death of the child took place after attacks of vomiting and cyanosis. The necropsy showed extensive pneumonia, interstitial hepatitis, and nephritis. There was no arsenic in the liver, and only one part in ten million in the mother's milk.

J. D. ROLLESTON.

Injection of the nursing mother with salvarsan ('*Ann. de gyn. et d'obst.*,' 1911, 2 sér. viii, p. 394).—E. Jeanselme has collected twelve cases from literature in addition to four personal cases. In six the treatment was successful, in ten, among which his own cases are included, unsuccessful. His conclusions are as follows: (1) Injection of the nursing mother with salvarsan sometimes causes a rapid disappearance of the *superficial* syphilitic lesions in the child, e.g. maculo-squamous eruptions or mucous tubercles. (2) A recurrence of these eruptions not infrequently occurs shortly afterwards. (3) The treatment has no favourable action on the *deep* or visceral lesions of heredo-syphilis. It may even aggravate the disease and cause the death of the child. It is therefore prudent before adopting the method to make sure that the principal organs are not involved. (4) Mercury in the form of inunctions may keep in check the lesions which have resisted salvarsan.

J. D. ROLLESTON.

Salvarsan milk ('*Münch. med. Wochens.*,' 1911, lviii, p. 1169).—Jesionek, unlike Taege and Duhot (*vide* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1910, vii, p. 450), found that the milk of women injected with salvarsan contained an appreciable amount of arsenic, provided 100 c.c. were examined. In one case the examination was made within twenty-four hours, and in another five days after injection. The milk of a goat similarly treated also yielded arsenic within twenty-four hours of injection. Jesionek records two cases in which the treatment of congenital syphilis by injection of the mother with salvarsan was unsuccessful. In the first case the child developed a syphilitic eruption the day following the injection. There was no question of Herxheimer's reaction, as there had been no previous eruption. Improvement did not occur until the mother had been given mercury and iodide. In the second case the child developed fresh syphilitic manifestations on its skin and mucous membranes during the mother's treatment, and its general condition became exceedingly grave. Disappearance of all the symptoms and rapid improvement occurred when cow's milk was substituted. These bad results are attributed to endotoxins in the child, which had either been introduced by the mother's milk or had been generated in the child itself by salvarsan. Jesionek also records a case of acquired syphilis in a girl, aged

5 years, in whom rapid disappearance of the primary and secondary lesions followed the administration of milk from a goat that had been injected with salvarsan. He concludes that non-syphilitic milk is more likely to cure a syphilitic infant than the milk of a syphilitic woman, even if her milk actually does contain anti-bodies.

J. D. ROLLESTON.

Treatment of syphilis in sucklings with the milk of a goat treated with salvarsan (*Paris méd.*, 1911-12, I, p. 86).—**Jeanselme, Vernes** and **Bertrand** mention the favourable results reported by Taege and Duhot from the treatment of syphilitic sucklings through injection of the mother with salvarsan, and the unfavourable results obtained by Jeanselme from the same method. Jesionek treated a case of acquired syphilis in a child of five years with the milk of a goat injected with 40 cgm. of salvarsan on the supposition that the drug was excreted in the milk. The observations of the above observers do not confirm the results reported by Jesionek. They treated a congenitally syphilitic child of five weeks with the milk of a goat treated with seven injections of salvarsan into the jugular vein (30 cgm. for the first injection, 40 cgm. for the others). The lesions in the child improved slowly for a time, but then remained stationary. The rapid effects mentioned by Jesionek were not observed, and the child was afterwards treated with mercury. The milk, tested by Bougault's method, showed no trace of arsenic, and when compared with milk containing a known quantity of arsenic led the authors to conclude that if the goat's milk contained any arsenic at all it could not have been more than one tenth milligramme per litre.

C. F. MARSHALL.

Otology, Rhinology, and Laryngology.

Technique of the auditory examination in infancy (*Bull. et Mém. de la Soc. Franç. d'Oto-Rhino-Laryng.*, 1911, p. 148).—**Constantin** asks how infants from one to two years old can best be examined as to their hearing. He enumerates the suggestions of a hitherto scanty literature. The method used by Escat is given in detail. The child should be tested first by the voice, spoken or whispered, and then with low, medium and high tuning-forks. The Galton-Edelmann whistle or any other sound-producing apparatus may then be used, the child's facial expression being watched attentively during the tests. The most notable sign of hearing is the rotation of the head to the side from which the sound comes. Attempts at testing the bone-conduction are misleading. By the methods described it can be judged approximately whether a given child can hear or is deaf.

MACLEOD YEARSLEY.

Acute otitis media (*New York Med. Journ.*, 1911, II, p. 874).—**G. L. Richards** speaks of the best method of treatment so as to prevent complications. He insists that every general practitioner should know how to examine an ear and gives hints as to the procedure. Treatment he divides into abortive and curative. The former consists of nasal and throat treatment and the use of an aural bougie of carbolic acid, opium, cocaine and atropine, slipped into the meatus, giving aconite by the mouth. If abortive treatment fails, incision should be done promptly when there is bulging. Richards pleads strongly for proper treatment by the general practitioner.

MACLEOD YEARSLEY.

The ætiological factors of otitis media purulenta chronica (*New York Med. Journ.*, 1911, II, p. 873).—**MacCuen Smith** considers neglect or improper treatment of acute tympanic disease to be the chief causative factors in chronic otorrhœa. He therefore discusses the causation of the original lesion. Valuable information is afforded by bacteriology, streptococci, staphylococci, pneumococci, and the influenza bacillus being most commonly responsible. Recurrence is sometimes due to the invasion of a different type of micro-organism, and this may account for chronicity in some cases. Conditions outside the ear are also of great importance in the establishment of a chronic discharge upon an acute condition; of course nasal and nasopharyngeal conditions especially influence results. Smith enumerates several additional contributory factors, including syphilis, tubercle, diabetes, gastro-intestinal toxæmias, and renal lesions, and lays special stress upon influenza as the most prevalent cause of aural suppuration of a type that is very prone to become chronic.

MACLEOD YEARSLEY.

The aural complications of the exanthemata (*New York Med. Journ.*, 1911, II, p. 834).—**Saunders** discusses the aural complications of scarlet fever, measles and diphtheria, dividing them clinically into two main classes: (1) serous or catarrhal, (2) purulent. He discusses the main features and treatment of these and insists upon the importance of early incision of the drum membrane. The occurrence of purulent otitis media in typhoid fever is given as about 2 per cent. It is remarkable that no mention is made of labyrinthine deafness occurring in scarlet fever without suppuration.

MACLEOD YEARSLEY.

Word-deafness in a girl, aged 14 years (*Liverpool Med.-Chir. Journ.*, 1911, XXXI, p. 384).—**H. Drinkwater** records this case. This girl was first seen for deafness, stated to have been due to a protracted "cold in the head" four years before. Before this, hearing and speech had been normal. Ten days after treatment by inflation and removal of adenoids she regained hearing, but could not understand or repeat the simplest words. The auditory word-centre must either have been damaged at the onset of the deafness or become inactive from disuse. She was improving by education. She was quite intelligent, read well, and understood what she read, and could name objects shown to her.

FREDERICK LANGMEAD.

A lecture on vaccines in aural practice (*Clin. Journ.*, 1911, XXXIX, p. 44).—**C. E. West** considers a vaccine the best of all tonics for those who have been suffering from staphylococcal intoxication. They do no harm in acute middle-ear infections if given with caution. They are useful in lateral sinus thrombosis cases, and are probably of value in meningitis and brain infections. His experience in chronic suppuration is small.

MACLEOD YEARSLEY.

A symptom of mastoiditis (*New York Med. Times*, 1912, XL, p. 1).—**Alderton** enumerates the usual symptoms of acute mastoid involvement and discusses cases of doubtful diagnosis. He draws attention, in the latter cases, to a symptom which, he contends, is often present and of "great value as corroborative evidence." This is a blurring of the outline of the mastoid tip as contrasted with that of the healthy side.

MACLEOD YEARSLEY.

Permeating mastoid meningitis ('*Practitioner*,' 1911, LXXXVII, p. 867).—**J. Burgess** records a case of this disease which ended fatally in a girl, aged 8 years. The author draws attention to the presence of several round patches of white fur on the tongue, which he had never seen before (*cf.* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1911, VIII, p. 518).

F. R. B. ATKINSON.

On a special form of mastoid infection in chronic infantile otorrhœa (mastoiditis nigra) ('*Bull. et Mém. de la Soc. Franç. d'Oto-Rhino-Laryng.*,' 1911, p. 161).—**Brindel** describes a chronic mastoid infection characterised by a diffuse cellulitis of a black colour, which he calls "mastoiditis nigra." It is particularly an affection of childhood and is found exclusively in old and especially in foetid otorrhœas. The black coloration of the alveolar walls and their contents does not exclude other lesions. It is a diffuse cellulitis of the mastoid process nearly always necessitating a complete exenteration of the mastoid. The after-treatment has no special features; sometimes, in later years, there is a formation in the operation cavity of bullæ filled by a black fluid. The pathogenesis of mastoiditis nigra is at present unknown. Brindel suggests it may be an aspergillus nigricans or some other parasitic infection. At present he can suggest nothing conclusive one way or the other.

MACLEOD YEARSLEY.

Three cases of sub-periosteal abscess of the mastoid ('*Journ. de Méd. de Paris*,' 1911, XXXI, p. 877).—**M. Jacob** describes three interesting cases in young persons aged 12 months, 11 years and 17 years respectively. They were characterised by little spontaneous pain, good general condition and little or no fever. Incision was followed by cure in eight days. In one case a pneumococcic arthritis occurred later.

MACLEOD YEARSLEY.

Membranous rhinitis ('*Lancet*,' 1912, I, p. 292).—**Duncan Forbes** and **H. P. Newsholme** write to illustrate the relation between membranous rhinitis and diphtheria, and to describe the treatment of three cases by a vaccine. Their conclusions are as follows: (1) Membranous rhinitis can readily produce similar disease in others. (2) The connection between membranous rhinitis and diphtheria in a school outbreak (described by the authors) was so intimate as to make a causal relation between them almost certain. (3) It is a point of great practical importance that the comparatively frequent occurrence and great infectivity of membranous rhinitis should be recognised widely. Missed cases of the disease would readily account for a not inconsiderable proportion of school diphtheria. (4) An autogenous vaccine seems to be of definite value in removing membrane, getting rid of nasal discharge, and hence greatly reducing the infectivity of membranous rhinitis. But the vaccine does not appear capable of completing the work of elimination after the membrane has gone.

MACLEOD YEARSLEY.

A case of rhinitis caseosa ('*Lancet*,' 1912, I, p. 226).—**H. W. Wilson** records the case of a girl, aged 11 years. Left naris normal; right naris full of muco-pus, with a yellowish-white "membrane" in the middle turbinal region. The underlying mucous membrane appeared healthy when the material was removed with forceps. Alkaline douching for a week cleared the nose completely. The mass proved to consist microscopically of

long, fine needles, mixed with structureless material, with numerous micro-organisms (short-chained streptococci and *Staphylococcus pyogenes aureus*), pus-cells, and a few crystals. MACLEOD YEARSLEY.

The rhino-pharynx as the habitat of the meningococcus (*Revue d'Hygiène*, xxxiii, 1911, p. 627).—**Netter and Debré** report that in the early stages of cerebro-spinal meningitis the meningococcus is found in about 93 per cent. of cases in the naso-pharynx, disappearing therefrom as the disease advances. It is also to be found among healthy people in contact with cases of meningitis or living in localities where the disease is epidemic. In certain epidemics the percentage of healthy carriers was as high as 32. Coryza is not uncommon among them. MACLEOD YEARSLEY.

On post-nasal catarrh in children and some of its consequences (*Lancet*, 1911, II, p. 1186).—**Eustace Smith** deals with this common and frequently overlooked trouble in a thoughtful and valuable paper. Attention is drawn to its relations to chronic cough, complete loss of appetite, "cyclical vomiting," glottic spasm, acute enlargement of cervical glands, and the like. The use of local applications by swabbing or by drops administered through the nose is recommended. MACLEOD YEARSLEY.

The prophylaxis of the oro-pharynx and naso-pharynx (*Med. Record*, 1911, II, p. 824).—**Güntzer** calls attention to pathological conditions invading the oro- and naso-pharynx, especially in acute infectious diseases, and complains of the neglect such conditions often meet with from the general practitioner. He points out that the causative micro-organisms of cerebro-spinal meningitis, poliomyelitis, scarlet fever, measles, pertussis, mumps, rheumatism, etc., all enter by the tonsils. A purely streptococcal infection of the throat would not be a rare affection were it more frequently recognised. Waldeyer's ring may be considered as the incubator for most of the infectious diseases. He describes the methods to be adopted to prevent a general systemic infection originating from oro- and naso-pharyngeal conditions. MACLEOD YEARSLEY.

Tonsillar and peritonsillar abscesses (*Gaz. des Hop.*, 1911, LXXXIV, p. 1279).—**Soubeyran and Sassy** discuss these matters from the points of view of complications, diagnosis, and treatment. Diagnosis must be made from gumma, tumours, odontogenous periosteal abscess, and retro-pharyngeal abscess. The methods of incision are fully discussed. A very full bibliography is appended. MACLEOD YEARSLEY.

Treatment of tonsillar and retropharyngeal abscesses (*Paris Méd.*, 1911-12, I, p. 22).—**J. Comby** condemns the use of a knife in such cases and recommends that the abscess should be opened by a grooved director and the opening enlarged with the point of an artery forceps. J. D. ROLLESTON.

Amygdalotomy and amygdalectomy (*New York Med. Journ.*, 1911, I, p. 1192).—**Max Lubman** suggests that any division of opinion upon the operative treatment of tonsils is due to ignorance of their functions, especially as regards the question of internal secretion. He compares this with the case of the appendix. Lubman himself considers that the tonsil

should be acted upon radically. The belief of Masini that it has an internal secretion comparable to that of the suprarenal is unfounded, whilst the menace that the tonsil can be to the organism is demonstrated daily.

MACLEOD YEARSLEY.

A clinical lecture on enucleation of the tonsils (*Clin. Journ.*, 1911, xxxix, p. 156).—**Dan McKenzie** discusses the advantages of tonsillectomy *v.* tonsillotomy as a routine operation, greatly in favour of the former. He then considers tonsillectomy as the operation of necessity in (1) acute septic infections and chronic septic states; (2) buried tonsils; (3) tuberculous cervical glands; (4) when, after tonsillotomy, the tonsils have "grown again"; (5) in cases of "irritable tonsil." The operation described is that generally performed by the author, for which he prefers general anæsthesia and has designed a special instrument or separator. Some very sapient remarks are made as to the occurrence of sepsis, which, in tonsil cases, is usually due to such avoidable causes as dental caries or pyorrhœa. There can be no doubt that, in dealing with hypertrophied faucial tonsils, one of the forms of enucleation now practised is the best and most surgical procedure.

MACLEOD YEARSLEY.

The relation of enlarged tonsils to endocarditis (*Ann. of Otol., Rhinol., and Laryngol.*, 1911, xx, p. 565).—**A. C. Getchell** reviews the literature of this subject and gives his own experiences. He is convinced that, so far as endocarditis is concerned, the simply hypertrophied tonsil has little to do with it as a causative factor.

MACLEOD YEARSLEY.

Reflections on the actual state of the question of adenoids (*Journ. de Méd. de Paris*, 1911, xxxi, p. 973).—**Balenweck** points out that symptoms attributed to adenoids occur in other affections; they should therefore, always be felt or seen. Adenoids may give no trouble and the symptoms are not always in relation with the volume of the growths. When adenoids, at any age and of whatever size, give rise to certain manifestations, they should be removed without delay. Removal should *always* be followed by a minute and repeated examination of the nasal fossæ. Hypertrophic rhinitis should be treated whether it gets better after adenoids are removed or not, and nasal abnormalities should be rectified. Buccal respiration and defective respiration very often require a careful course of re-education.

MACLEOD YEARSLEY.

Adenoids in the suckling (*Gaz. des Hôp.*, 1911, lxxxiv, p. 1711).—**Sargnon, Gaté and Durif** discuss this question (laying stress upon the respiratory and other complications of adenoids), so often repeated, and, judging by cases one sees, yet requiring many more repetitions before the profession generally sees its duty clear before it—and does it.

MACLEOD YEARSLEY.

Vincent's angina (*Boston Med. and Surg. Journ.*, 1911, II, p. 720).—**E. H. Place** reviews the literature and records a case of noma of the cheek due to Vincent's organisms in a boy, aged 2½ years, who developed ulceration of the gums and buccal mucosa at the end of the third week of scarlet fever. No diphtheria bacilli were found in the cultures, but smears showed typical Vincent's organisms. Two weeks later the alveolar process was involved. Finally the whole left cheek became gangrenous and the frontal bone necrosed. Death took place a fortnight after an unsuccessful operation.

J. D. ROLLESTON.

Retro-pharyngeal abscess (*New York State Journ. Med.*, 1911, xi, p. 492).—**M. J. Levitt** reports on 25 cases: 18 were under one year; the youngest was aged $4\frac{1}{2}$ months, the oldest $2\frac{1}{2}$ years. Eleven were males, 14 females. Eleven were on the right, 11 on the left, and 4 towards the median line. Four were previously healthy. Twenty-one were either weak from birth or debilitated by recent illness such as bronchitis, measles or scarlet fever.

J. D. ROLLESTON.

Some cases of leech in the air-passages (*Ind. Med. Gaz.*, 1911, XLVI, 465).—**Major Scott-Moncrieff, I.M.S.**, describes two cases of leech in the larynx in boys of fourteen, and one of a leech in the nose in a child of three. The first required tracheotomy and partial laryngotomy, in the second the leech was removed with forceps from the posterior surface of the epiglottis, to which it was attached, and in the third case the animal appeared during chloroform anæsthesia at the anterior nares, and was removed with ease.

MACLEOD YEARSLEY.

Laryngitis in varicella (*Rev. méd. de Normandie*, 1911, xii, p. 41).—**A. Halipré and Tregouet**.—A boy, aged $5\frac{1}{2}$ years, had an attack of laryngeal diphtheria necessitating intubation. The tube was removed on the third day, and all went well till six days later, when the temperature rose to $100\cdot4^{\circ}$ F. The following day a generalised eruption of varicella appeared accompanied by fresh difficulty in breathing and loss of voice. The next day the dyspnoea was as severe as on the first occasion and intubation was again performed. Bacteriological examination, which had previously shown diphtheria bacilli, now yielded streptococci only. The tube was removed within three days and subsequent recovery was uneventful. The authors could find only four other cases on record of laryngitis in varicella, two related by Boucheron and two by Marfan and Hallé.

J. D. ROLLESTON.

An analysis of 312 cases of laryngeal diphtheria (*Austral. Med. Journ.*, 1911, i, p. 231).—**F. V. Scholes**.—These cases formed a percentage of 25·5 of 1224 cases of diphtheria; 178 were boys, 134 girls. The mortality among the former was 9·0 per cent., in the latter 3·7 per cent. All but four were under ten years. The rarity of primary laryngeal diphtheria is shown by the fact that in 256 out of 264 in whom the throat was examined there was either membrane in the fauces or signs of its recent presence there. The average dose for each patient was 17,600 units; 140, or 45 per cent., were intubated, with 13 deaths. In 13 cases the tube was retained over ten days. Of these two died with the tube in position, four were cured by persistent intubation, four were cured by tracheotomy, three had secondary tracheotomy performed with resulting "retained tracheotomy tube." Complications and sequels were rare. Paralysis occurred in only 6 cases or 1·9 per cent. Serum rashes were noted in 36·8 per cent.

J. D. ROLLESTON.

Reviews.

GUY'S HOSPITAL REPORTS. Edited by F. J. STEWARD, M.S., and FRENCH, M.D. Vol. LXV. Pp. 414. London: J. & A. Churchill, 1911. Price to non-subscribers, 10s. 6d.

As a result of the large number of medical publications the Reports of Hospitals have in some instances suffered, but the present instalment of the 'Guy's Hospital Reports' contains a valuable collection of original papers, one or two only of which have seen the light elsewhere. Dr. Hertz, who is physician in charge of the Department for Nervous Diseases, has edited and partly contributed a series of "Neurological Studies," in the first of which stress is laid on the value of the tendo-Achillis jerk as an early sign of tabes and of latent peripheral neuritis, especially when due to alcohol or diabetes, its loss preceding that of the knee-jerk; its absence in cases of cardiac failure points to an alcoholic origin. In a thesis for the M.B. Cantab. on "Rheumatic Fever in the Last Decade," Mr. Sandison finds that among 1053 cases of rheumatic fever there was only 17, or 1.6 per cent., instances of salicylism. In view of the frequency of the disease in children it is remarkable that only one case of salicylism was under fifteen years of age. In four cases aspirin was substituted for salicylate of sodium, and in all these cases the salicylism cleared up and the joint-pains and fever did not recur. There are two papers on the closely allied subjects of "Herpes Auris," and "Acute Inflammation of the Geniculate Ganglion" by Mr. Mollison and Dr. Morton Palmer. There are also two papers on exophthalmic goitre dealing respectively with the prognosis and with the operative treatment. Dr. Price Jones contributes an interesting essay on the "Aspect of Leukæmia from the Bone-marrow"; he refers to lymphanæmia, which has the same relation to leukanæmia that lymphocytic has to myeloid leukæmia. Dr. French gives a coloured plate of pigmentation of the buccal mucous membrane in pernicious anæmia which is remarkable in that arsenic had not been given and so could not have played any part in its production. H. D. R.

PREVENTION OF DENTAL CARIES. By J. SIM WALLACE. Pp. 45. London: The Dental Manufacturing Company, 1911. Price 1s. 6d.

Dr. Sim Wallace begins his treatise with the statement that decay is due to the fermentation of carbohydrate material which has been allowed to stagnate in irregular dental pits and crevices, and to recession and abnormal arrangement of the gums. He attributes these pits and crevices to the acute specific diseases complicated by the septic state of the mouth. He shows that irregularity produces decay by the crown of the lower of two adjoining teeth bruising the upper one against which it impinges. Much of this irregularity can be prevented by breast- or hygienic bottle-feeding, followed later on by a diet ensuring efficient mastication. Dr. Wallace says that adenoids, which frequently bring about overcrowding and irregularity of the teeth, are due to cold and damp, and that the surest way to prevent these growths is to open the door instead of the window. No statistical or climatological evidence is forthcoming to justify this interesting statement.

Recession of the gums is brought about by loss of function of the teeth, and the consequent stagnation of albuminous matter and mucus around the gum and tooth junction. Tartar is then formed and further recession occurs, allowing for the deposit of carbohydrate material, which undergoes

fermentation, decalcifies the enamel, and finally produces caries. This process is to a certain extent prevented by the *Streptococcus brevis*, which liquefies albuminous matter, mucus, and incipient tartar formation, and by the mucus, and saliva lubricating the food, thus ensuring its removal from the oral cavity. Food-bolting results from giving material which does not require mastication and which has no detergent or cleansing effect upon the teeth. The absence of this quality in pap food is the main cause of caries, and is one of the chief reasons why children who are deprived of the normal stimulus afforded by hard substances to the palate desire sweetmeats. Fruits which are sweet as well as fibrous, and require, therefore, thorough mastication, should replace bon-bons in the dietary of the young. Bacteria are only of importance in that they acidify the carbohydrates which are sticking to the teeth, and by making the mucus viscid prevent neutralisation and ensure decalcification. With regard to diet on weaning, it is recommended that toast be given to the infant to gnaw twice a day. Rusks and milk puddings made sufficiently solid are to follow a month or two later, and boiled fish and chicken may also be given in small amounts. To ensure thorough cleansing of the teeth, toast, baked bread, and crusty bread rolls should replace bread and porridge. Great stress is laid upon the importance of fruit, especially the apple, as a preventer of caries. Fourteen children have been brought up on this diet, and at ages varying from five to seven there was not a single carious tooth among them. Plain water is to be used to rinse the mouth until the water ejected is free from milkiness. Tooth-brushes are shown to be useless for cleansing deep crevices and the interdental spaces, but they have their uses in cleansing teeth left dirty by an unhygienic diet. Tooth-picks are useful when recession of the gums has occurred.

Dr. Wallace has written a most interesting book, and one the truth of which can easily be proved or otherwise by the observation of medical men on their own children. C. R.

DIE ERKENNUNG DER PSYCHOPATHISCHEN KONSTITUTIONEN (KRANKHAFTEN SEELISCHEN VERANLAGUNGEN) UND DIE ÖFFENTLICHE FÜRSORGE FÜR PSYCHOPATHISCH VERANLAGTE KINDER. By Prof. Dr. TH. ZIEHEN. Berlin: S. Karger, 1912. Pp. 34. Price M. 0.80.

In this small pamphlet Prof. Ziehen pleads for the care of children who show no marked mental disease, but various morbid psychical phenomena, such as weakness of will-power, uncontrollable emotions and the like—the so-called psychopathic constitution. The professor has, during the year 1910, met with 201 such cases, 170 severe and 31 slight. Various types of this constitution with illustrated cases are described, the emotional, the depressive, obsessive, and hyper-fantastic—words which sufficiently explain themselves. Many of these cases become incurably mentally affected, and pass into asylums; others become criminals and prostitutes. Cases of this constitution are not at the beginning feeble-minded, and should not be sent to any asylum or allowed to mix with mentally deficient children, and to avoid such cases going from bad to worse the professor rightly maintains that special buildings should be erected for their treatment, by means of which they may become useful and respectable members of society. Such a building is in course of erection in Germany and will be opened shortly, but many more are needed. The pamphlet should be read by all interested in this question. F. R. B. A.

ANATOMIE TOPOGRAPHIQUE ET CHIRURGIE DU THYMUS. By EUGÈNE OLIVIER. Pp. 152, 16 figs., 2 skiagrams. Paris: G. Steinheil.

THIS thesis contains an interesting and useful description of the anatomy of the thymus and of the surgical treatment of enlargement of the gland, with a bibliography of 142 items mainly from French literature. The author has made original observations on both the anatomy and the surgery of the thymus gland. In the section on anatomy, which occupies thirty-three pages, he states that he finds the weight of the gland to be 4 grm. at birth and that it increases by 2 grm. yearly until three years of age, after which it diminishes. He regards any thymus weighing more than 15 grm. as hypertrophied. Apparently the relation of thymic enlargement and lymphatism does not come within the scope of this work, and the two main clinical forms of thymic enlargement considered are: (a) the continuous, characterised by permanent dyspnoea, and (b) the intermittent, characterised by crises of suffocation; descriptions are also given of other but anomalous clinical forms. Of the three surgical methods of dealing with thymic enlargement, namely exothymopexy, resection of the manubrium sterni, and thymectomy, the first two are difficult and dangerous. After discussing partial and total and subcapsular and extra-capsular thymectomy, the author decides that the partial subcapsular operation, which takes barely ten minutes, is the only proper measure, and gives a full and illustrated description of this procedure. Up to August, 1911, he collected 39 cases in which thymectomy had been performed; in 4 of these, all fatal, the diagnosis was incorrect, the condition being enlarged tracheo-bronchial glands. In the remaining 35 cases the operative mortality was *nil*, but 11 died afterwards.

H. D. R.

THE MYSTERIES OF LIFE. By ISABELLE THOMPSON SMART, M.D., Medical Examiner of Defective Children, Department of Education, City of New York, Special Lecturer, New York Normal School of Physical Education, etc. Published by The Bodmer Company, New York.

THIS work is comprised of four little booklets entitled respectively—"What a mother should tell her little girl," "What a mother should tell her daughter," "What a father should tell his little boy," "What a father should tell his son." The series is admirably suited to instruct the young in matters pertaining to sex. Numbers I and III are practically identical. In these the "Story of Life" is told in plain, simple language, the process of reproduction being traced from the vegetable kingdom to the highly developed mammals. In the latter portions there is much good advice regarding the healthy development of girlhood and boyhood. In numbers II and IV there is greater diversity, considerable modifications being necessary to meet the requirements of the respective sexes. The aim, however, is the same, namely to impress upon the youth of both sexes the proper use of the sexual function and the dangers of self-abuse. The advice tendered is sound and practical.

We have no hesitation in recommending these little brochures. To obtain the full benefit of numbers I and III it is absolutely necessary that a sympathetic and intelligent person should amplify the matters discussed and should be ready to explain any points which may puzzle the child mind. The appeal to young men and young women ought to be readily appreciated by all of average intelligence. Dr. Isabelle Smart has dealt with a difficult subject in a thoroughly interesting and very able manner.

J. A.